COMPLETE PYTHON

Programming

Newtum®

Sr No.	Program List	
	Single line messages	
1.	Write a program To print a message “Wish you all the best!”	**Run Code >>**
2.	Write a program To print message “Programming is fun”	**Run Code >>**
	Multi-line messages	
3.	Write a program To print a message “Hello! How are you?”	**Run Code >>**
4.	Write a program To print message “India is my country I love my country I proud to be an Indian”	**Run Code >>**
	Messages using tab	
5.	Write a program To print message “This is my first Day of programming”	**Run Code >>**
6.	Write a program To print the message “Hi Have a nice day!”	**Run Code >>**
7.	Write a program To print the message “Happy New Year!”	**Run Code >>**
8.	Write a program To print the message “Wish you Many many Happy returns Of the day!”	**Run Code >>**
9.	Write a program To print a message “Wish you A very happy And Prosperous New Year!”	**Run Code >>**

Sr No.	Program List	
	Data Types	
	Int	
10.	Write a program to store nos. 10 and 20 and reprint them.	Run Code >>
11.	Write a program to store 20 and 30 and get their addition.	Run Code >>
12.	Write a program to store 60 and 20 and get their addition, subtraction, multiplication and division.	Run Code >>
13.	Write a program to get a square and cube of 7.	Run Code >>
	Float	
14.	Write a program to store length as 3.5 and 4.8 as breadth of a rectangle and get its area. Area=Length*Breadth	Run Code >>
15.	Write a program to store base as 7.5 and height as 4.9 and get area of triangle. Area=0.5*Base*Height	Run Code >>
16.	Write a program to store radius of a circle as 3.5 and get its area and circumference. Area=3.14*r_2 Circumference=2*3.14*r	Run Code >>
	Char	
17.	Write a program to store name of student as “Ram” and his grade as “A”. get the output as s “Grade of Ram is A”	Run Code >>
18.	Write a program to store name of country as “USA” and its currency symbol as “$” get the output as “Currency symbol of USA is $”	Run Code >>
19.	Write a program to store name of person as “Dinesh Joshi”, building as “Sai Darshan”, street as “D. P. Road”, name of city as “Badlapur”, region as ‘E’, pincode as "421503 ". Print the stored details using single print(), but output must be in different lines	Run Code >>
	Using all datatypes	
20.	Write a program to store name as “Ramesh Kulkarni”, gender as “M”, age as 30 years and weight as 66.5 kg. and print all the details one below another.	Run Code >>

21.	Write a program to store roll no. as “R50”, name of student as “Amit Jadhav”, his grade is “A”, marks of English as 75, Math as 82 and Science as 94. Get his total and average. Print mark sheet along with all the details.	Run Code >>
	Accepting data through keyboard and expressions	
22.	Write a program to accept any 2 nos. and reprint them.	Run Code >>
23.	Write a program to accept any 2 nos. and get their sum.	Run Code >>
24.	Write a program to accept any 2 nos. and get their addition, subtraction, multiplication and division.	Run Code >>
25.	Write a program to accept any no. and get its square and cube.	Run Code >>
26.	Write a program to accept length and breadth of a rectangle and get its area.	Run Code >>
27.	Write a program to accept base and height of a triangle and get its area.	Run Code >>
28.	Write a program to accept side of square and get its area.	Run Code >>
29.	Write a program to accept radius of a circle and get its area and circumference.	Run Code >>
30.	Write a program to accept name and grade of a student and reprint them.	Run Code >>
31.	Write a program to accept name of country and its currency symbol and reprint them.	Run Code >>
32.	Write a program to accept name of person, building name, street, city, pincode and region (E/W) and print them one below another.	Run Code >>
33.	Write a program to accept roll no., name, grade and marks of English, Maths and Science of a student and get their total and average. Print mark sheet along with all the details.	Run Code >>
34.	Write a program to accept worker no., name of worker, type of worker(T/P) hours worked and calculate wages by Rs. 100/hr. Print wage-slip.	Run Code >>
35.	Write a program to accept meter no., name of consumer, line type(C/D), current reading, previous reading and calculate net units consumed and charges by Rs.4.5/unit . Print electricity bill along with all the details.	Run Code >>
36.	Write a program to accept item no., name of item, price per item, quantity purchased. Calculate total bill amount, offer a discount @ 10%. Calculate net bill amount after deducting discount. Print bill including all details.	Run Code >>
37.	Write a program to accept account no., name of account holder, type of account(S/C) and current balance. Calculate simple interest @ 7% on current balance and also calculate updated balance. Print all the details.	Run Code >>

38.	Write a program to accept employee no., name of employee, his grade and basic salary. Calculate following allowances. HRA ------ 30% on basic salary DA ------ 20% on basic salary CA ------ 10% on basic salary PF ------ 5% on basic salary Gross salary = Basic salary + HRA + DA + CA Net salary = Gross salary – PF Print pay-slip along with all the details	Run Code >>
	Modulo operator	
39.	Write a program to accept any 2 nos. and get their quotient and remainder.	Run Code >>
40.	Write a program to accept length of a metal strip in meters only and find out many pieces you can make of 5 meters and 3 meters of the strip. And also find out wastage.	Run Code >>
41.	Write a program to accept any amount in rupees only and find out no. of notes of Rs.1000, Rs.500, Rs.100, Rs.50, Rs.20, Rs.10, Rs.5, Rs.2 and Rs.1 in it.	Run Code >>
42.	Write a program to accept any 3-digit no. and get its digits in reverse sequence.	Run Code >>
43.	Write a program to accept any 3-digit no. and get the sum of its digits.	Run Code >>
44.	Write a program to accept any 3-digit no. and get its reverse no.	Run Code >>
	Mathematical functions	
45.	Write a program to accept any no. and get its square and cube.	Run Code >>
46.	Write a program to solve the following equation. $\sqrt{x^3 + y^2}+z$	Run Code >>
47.	Write a program to find out roots of quadratic equation. $\frac{-b\pm\sqrt{b^2-4ac}}{2a}$	Run Code >>
48.	Write a program to accept principal amount, period of deposit, rate of interest and find out compound interest. Principal amt. * (1 + rate/100) ^ period	Run Code >>
	If-----else	
49.	Write a program to accept salesman no., name of salesman and sales amount. Calculate commission @ 5% if sales amount is up to Rs. 1000/- otherwise calculate sales amount @ 10%.	Run Code >>

50.	Write a program to accept any integer and check whether it is even or odd.	**Run Code >>**
51.	Write a program to accept any 3 nos. and find out maximum out of them.	**Run Code >>**
52.	Write a program to accept any 3 nos. and find out minimum out of them.	**Run Code >>**
53.	Write a program to accept item no., name of item, price per item and quantity. Calculate total bill amount and apply discount @ 10% for bill amount above Rs.5000/- otherwise apply discount @ 8% also calculate net bill amount.	**Run Code >>**
54.	Write a prog to accept worker no., name of worker, hours worked and calculate wages as follows. For first 8 hours----Rs. 50/hr. Next all hours----Rs. 70/hr	**Run Code >>**
55.	Write a program to accept meter no., name of consumer, current reading, previous reading and calculate net units consumed and charges as follows. For first 100 units ----Rs. 3.5/unit Next all units---- Rs. 5/unit	**Run Code >>**
	Multiple if	
56.	Write a program to accept any 2 nos. and compare them with each other and display proper messages.	**Run Code >>**
57.	Write a program to accept any 3 nos. and find out maximum and minimum out of them.	**Run Code >>**
58.	Write a program to accept salesman no., name of salesman, salary of salesman and sales amount. Calculate commission as follows. Sales amount Commission 1- 1500 5% 1501 - 3000 7% 3001 - 4500 10% 4501 and above 12% Calculate total income of salesman. Display all details	**Run Code >>**
59.	Write a program to accept item no., name of item, price per item and quantity. Calculate total bill amount and calculate discount as follows. Bill amount Discount 1 - 3000 2% 3001 - 6000 3% 6001 and above 5% Calculate net bill amount. Display all details.	**Run Code >>**

60.	Write a prog to accept worker no., name of worker, hours worked and calculate wages as follows. For first 8 hours ---- Rs. 50/hr. Next 2 hours ---- Rs. 70/hr. Next all hours ---- Rs. 90/hr.	Run Code >>
61.	Write a program to accept meter no., name of consumer, current reading, previous reading and calculate net units consumed and charges as follows. For first 100 units ---- Rs. 3.5/unit Next 250 units ---- Rs. 5/unit Next all units ---- Rs. 7.5/unit	Run Code >>
	Nested if	
62.	Write a prog to accept worker no., name of worker, hours worked and type of worker (T/P) and calculate wages as follows. 'T'- Temporary For first 8 hours ---- Rs. 20/hr. Next 2 hours ---- Rs. 30/hr. Next all hours ---- Rs. 50/hr. 'P' – Permanent For first 8 hours ---- Rs. 70/hr. Next 2 hours ---- Rs. 80/hr. Next all hours ---- Rs. 90/hr.	Run Code >>
63.	Write a program to accept meter no., name of consumer, current reading, previous reading and line type(C/D/I) and calculate net units consumed and charges as follows. 'D' – Domestic For first 100 units ---- Rs. 2.5/unit Next 250 units ---- Rs. 4/unit Next all units ---- Rs. 5.5/unit 'C' – Commercial For first 100 units ---- Rs. 3.5/unit Next 250 units ---- Rs. 5/unit Next all units ---- Rs. 7.5/unit 'I' – Industrial For first 100 units ---- Rs. 4/unit Next 250 units ---- Rs. 6/unit Next all units ---- Rs. 8/unit	Run Code >>
	Logical operators (and) (range)	
64.	Write a program to accept marks of English, Maths, Science. If a student has scored at least 35 marks in each subject consider him as passed otherwise failed.	Run Code >>
65.	Write a program to accept any 3 nos. and arrange them in ascending order.	Run Code >>

66.	Write a program to accept roll no., name of a student, marks of theory and practical out of 50 each of one subject. Get their total. If student has scored at least 15 marks in each subject and his total is at least 40 then consider him as passed. If student has scored at least 15 marks in each subject and his total is exactly 39 then consider him as promoted. In all other cases consider him as failed.	**Run Code >>**
67.	Write a program to accept roll no., name, grade and marks of English, Maths and Science of a student and get their total and average. If student has scored at least 35 marks in each subject consider him as passed otherwise failed. Allot him grades as follows Average above 60 ---- 'A' Average between 45 to 60 ---- 'B' Average between 35 to 45 ---- 'C' Average below 35 ---- '- ' Prepare mark-sheet	**Run Code >>**
	(or) (in)	
68.	Write a program to accept marks of English, Maths, Science. If student has scored less than 35 marks in any subject then consider him as failed otherwise consider him as passed.	**Run Code >>**
69.	Write a program to accept any character any check whether it is vowel or not.	**Run Code >>**
70.	Write a program to accept any no. between 1 to 10 and print whether it is even or odd.	**Run Code >>**
71.	Write a program to accept month no. and year and display no. of days in that month.	**Run Code >>**
	while loop	
72.	Write a program to print "hello" for 5 times.	**Run Code >>**
73.	Write a program to get areas of 7 rectangles.	**Run Code >>**
74.	Write a program to print first 10 natural nos.	**Run Code >>**
75.	Write a program to print first 10 even nos.	**Run Code >>**
76.	Write a program to print first n natural nos.	**Run Code >>**
77.	Write a program to print first n even nos.	**Run Code >>**
78.	Write a program to print sum of first n natural nos.	**Run Code >>**
79.	Write a program to get factorial of any no.	**Run Code >>**
80.	Write a program to get table of n.	**Run Code >>**

81.	Write a program to print first 20 elements of Fibonacci series. (0,1,1,2,3,5,8,13,21,……)	**Run Code >>**
82.	Write a program to accept any no. and check whether it is prime or not.	**Run Code >>**
83.	Write a program to accept any integer and get the sum of its digits.	**Run Code >>**
84.	Write a program to accept any integer and get its reverse no.	**Run Code >>**
85.	Write a program to accept any 2 nos. and get its GCD and LCM	**Run Code >>**
86.	Write a program to accept any no. and check whether it is Armstrong no. or not.	**Run Code >>**
87.	Write a prog to accept any integer and check whether it is palindrome no. or not.	**Run Code >>**
88.	Write a prog to accept principal amt, period of deposit and rate of interest and calculate cumulative interest as follows Principal amt*((1+rate/100)^1 +(1+rate/100)^2--------+(1+rate/100)^n	**Run Code >>**
	For loop	
	Nested for	
89.	Write a prog to print 1 2 2 3 3 3 4 4 4 4	**Run Code >>**
90.	Write a prog to print 1 1 2 1 2 3 1 2 3 4 1 2 3 4 5	**Run Code >>**
91.	Write a prog to print 1 2 3 4 5 6 7 8 9 10	**Run Code >>**
92.	Write a prog to print * * * * * * * * * *	**Run Code >>**

93.	Write a prog to print *	Run Code >>

94.	Write a program to print
	  *
	  * *
	  * * *
	* * * *
	  * * *
	  * *
	  *
		Run Code >>

95.	Write a program to print
	  *
	  * * *
	  * * * * *
	* * * * * * *
		Run Code >>

96.	Write a program to print * * * * * * * * * * * * * * * * * * * *	Run Code >>

97.	Write a program to print
	  1
	  1 2 1
	  1 2 3 2 1
	1 2 3 4 3 2 1
		Run Code >>

98.	Write a program to print a a b a b c a b c d	Run Code >>

99.	Write a program to print
	  A
	  A B A
	  A B C B A
	A B C D C B A
		Run Code >>

100.	Write a program to print prime nos. between 20 to 50.	**Run Code >>**
101.	Write a program to print prime nos. between given range.	**Run Code >>**
102.	Write a program to print Armstrong nos. between 1 to 500.	**Run Code >>**
103.	Write a program to print Armstrong nos. between given range	**Run Code >>**
104.	Write a program to print tables from 5 to 10.	**Run Code >>**
105.	Write a program to print tables between given range.	**Run Code >>**
	String functions	
106.	Write a programram to accept roll no., name, grade and marks of English, Maths and Science of a student and get their total and average. If student has scored at least 35 marks in each subject allot him remark as “Pass” otherwise “fail”. Allot him classes as follows. Average above 60 ---- First Average between 45 to 60 ---- Second Average between 35 to 45 ---- Pass Average below 35 -------Prepare mark-sheet.	**Run Code >>**
107.	Write a programram to accept name and surname and join them including space.	**Run Code >>**
108.	Write a programram to accept name, middle name and surname and get full name in another variable separated by spaces by keeping original values as it is.	**Run Code >>**
109.	Write a program to accept worker no., name of worker, hours worked and type of worker and calculate wages as follows. Skilled For first 8 hours ---- Rs. 20/hr. Next all hours ---- Rs. 50/hr. Unskilled For first 8 hours ---- Rs. 70/hr. Next all hours ---- Rs. 90/hr.	**Run Code >>**
110.	Write a program to accept any word and check whether it is palindrome or not.	**Run Code >>**
	User defined functions	
1.	Write a program to print message as follows. Hello! Have a nice day! How are you? How are your parents? Also tell them, Have a nice day!	**Run Code >>**

2.	Write a program to accept any 2 nos. and get their sum.	**Run Code >>**
3.	Write a program to accept any 2 nos. and find out maximum.	**Run Code >>**
4.	Write a program to accept any 3 nos. and find out minimum out of them.	**Run Code >>**
5.	Write a program to accept any no. and get its factorial.	**Run Code >>**
6.	Write a program to accept any no. and check whether it is prime or not using returning object method.	**Run Code >>**
7.	Write a program to print prime nos. between 20 to 50 using returning value method.	**Run Code >>**
8.	Write a program to accept any 2 nos. and find out its GCD and LCM using returning object method.	**Run Code >>**
9.	Write a program to solve following series. $\frac{1}{1}+\frac{1}{1+2}+\frac{1}{1+2+3}+---\frac{1}{1+2+---n}$	**Run Code >>**
10.	Write a program to solve following series. $\frac{2}{1!}+\frac{3}{2!}+\frac{4}{3!}+---\frac{n+1}{n!}$	**Run Code >>**
11.	Write a program to solve following series. $\frac{2}{1}+\frac{3}{2^2}+\frac{4}{3^3}+---\frac{n+1}{n^n}$	**Run Code >>**

This Python programming exercise is a collaboration between Techaroha Solutions Private Limited and Netum Solutions Private Limited.

Techaroha contributed the necessary functional and technical knowledge for a comprehensive programming list, beneficial for students.

Newtum Solutions has granted permission for visitors to use the online compiler provider on their infrastructure.

Techaroha has supplied all the tools and software needed to build and run your own compiler. Visit their website at https://techaroha.com/ai-compiler/ for more information.

For any additional needs or questions, please feel free to reach out.

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