**Program On Input/Output and Variables & Data Types**

1. Write a program to display the message "Hello World".
2. WriteProgramtoacceptstudentdetailsfromuserasstudentname,rollnumber,course,city Display all information after accepting info using single print statement.

Input: Enter Student Name: Ajay

EnterRoll Number: 12345

Enter Course: Computer Science

Enter City: Pune

Output: Student Name: Ajay,   
Roll Number: 12345,

Course: Computer Science,

City: Pune

1. Create a program to add two numbers provided by the user and display the result.

Input: Number 1: 8

Number 2: 15

Output: The result of adding 8 and 15 is: 23

1. Write a program to multiply two numbers provided by the user and display the result.

Input: Number 1: 6

Number 2: 7

Output: The result of multiplying 6 and 7 is: 42

1. Write a program to accept marks of 3 subjects and calculate and display total and percentage.

Input: Marks in Subject 1: 85

Marks in Subject 2: 90

Marks in Subject 3: 78

Output: Total Marks: 253, Percentage: 84.33%

1. Write Program to print size of int, float, double, etc

Output: Size of int: 4 bytes

Size of float: 4 bytes

Size of double: 8 bytes

1. WriteProgram toprintASCIItable(0-127).
2. Write a program which accept radius of circle from user and calculate its area.

Consider value of PI as 3.14. (Area = PI \* Radius \* Radius)

Input : 1.12  
 Output: **3.940816**

1. Write a program which accept width & height of rectangle from user and calculate its area. (Area = Width \* Height)

Input:Width: 7.5 Height: 4.2

Output:Area: 31.5

1. Write a program which accept distance in kilometre and convert it into meter.

(1 kilometre = 1000 Meter)

Input: Distance: 5.7 km

Output: Distance in meters: 5700 meters

1. Write a program which accept temperature in Fahrenheit and convert it into Celsius.

(1 Celsius = (Fahrenheit -32) \* (5/9))

Input: Temperature: 98.6°F

Output: Temperature in Celsius: 37.00°C

**Program OnSelection Statements**

1. Write a program to check if a given number is even or odd.

Input: Enter number: 27

Output: 27 is odd number

1. Create a program to check if a given number is positive or negative.

Input: Enter number: -27

Output: 27 is negative number

1. Write a program to find the maximum number between two given numbers.

Input: Enter two number: 23 45

Output: The greater number is : 45

1. Develop a program to find the maximum number among three given numbers.

Input: Enter three number: 223 415 112

Output: The greater number is : 415

1. Accept one number and check whether is divisible by 7 or not.

Input: Enter number: 49

Output: 49 is divisible by 7

1. Write a program that accepts a day number (1 to 7) and prints the corresponding day of the week

Input: Enter number: 4 Output:The day of the week is: Wednesday

Input: Enter number: 2 Output: The day of the week is: Monday

1. Create a program that accepts a month number (1 to 12) and prints the corresponding month name.

Input: Month Number: 5

Output: The month is: May

1. Accept on number from user if number is less than 10 then print “Hello” otherwise print “world”.

Input:Number: 7 Output: "Hello"

Input:Number: 12 Output: "world"

1. Accept on character from user and check whether that character is vowel (a,e,i,o,u) or not.

Input: E Output: TRUE   
Input: d Output: FALSE

1. Accept one character from user and convert case of that character.

Input : a Output : A

Input : D Output : d

**Program On Iteration (Loop)**

1. Use a loop to print the numbers from 101 to 110.
2. Write a program to print 10 to 1 number on screen
3. WriteProgramtodisplaytableofnumbersofanygiven range.
4. Accept one number from user and print that number of \* on screen.
5. Write a program to print the letters from H to N using a loop.
6. Write a program to calculate and print the factorial of a given number.
7. Create a program to print the multiplication table of a given number.
8. Write a program to print the reverse multiplication table of a given number.
9. Write a program to calculate the sum of 10 numbers inputted by the user.
10. WriteProgramtofindminimum&maximumno.from10inputted numbers.
11. Write Program to make sum of numbers till user enter zero or negative number.

(Use break/continue & unconditional loop).

1. Accept two numbers from user and display first number in second number of times.

Input :10 5

Output : 10 10 10 10 10

1. Write a program which accept number from user and display its factors in

decreasing order.

Input : 12

Output : 6 4 3 2 1

1. Write a program which accept number from user and display all its non factors.

Input : 12

Output : 5 7 8 9 10 11

1. Write a program which accept number from user and display its multiplication of factors.

Input : 12

Output : 144 (1 \* 2 \* 3 \* 4 \* 6)

1. Write a program which accept number from user and return difference between

summation of all its factors and non factors.

Input : 12

Output : -34 (16 -50)

**Program On Digit**

1. Write a program to accept a number from the user and display its digits in reverse order.
2. Write a program that accepts a number from the user, sums its digits, and displays them in the following format .

Input : 795

Output: 7+9+5 =21

1. Write a program which accept number from user and display its digits in reverse order.

Input: 1234

Output: 4

3

2

1

1. Write a program which accept number from user and count frequency of 2 in it.

Input : 1235 Output : 1

Input : 122122 Output: 4

1. Write a program which accept number from user and check whether it contains 2 in it or not.

Input : 135 Output : There is no Two

Input : 122122 Output: It Contains Two

1. Write a program which accept number from user and return the count of even digits.

Input :12345   
Output : 2

1. Write a program which accept number from user and return difference between summation of even digits and summation of odd digits.

Input : 12345

Output : -3 (6- 9)

24.Write a program which accept number from user and return multiplication of all digits

Input : 12345

Output :120

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| 13.Half Diamond Star Pattern   |  |  |  |  |  | | --- | --- | --- | --- | --- | | \* |  |  |  |  | | \* | \* |  |  |  | | \* | \* | \* |  |  | | \* | \* | \* | \* |  | | \* | \* | \* | \* | \* | | \* | \* | \* | \* |  | | \* | \* | \* |  |  | | \* | \* |  |  |  | | \* |  |  |  |  | | 14.Half Diamond Star Pattern Inverted   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  | \* | |  |  |  | \* | \* | |  |  | \* | \* | \* | |  | \* | \* | \* | \* | | \* | \* | \* | \* | \* | |  | \* | \* | \* | \* | |  |  | \* | \* | \* | |  |  |  | \* | \* | |  |  |  |  | \* | |

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| 15. Write a program to print hollow diamond star pattern   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | | \* | \* | \* | \* | \* |  | \* | \* | \* | \* | \* | | \* | \* | \* | \* |  |  |  | \* | \* | \* | \* | | \* | \* | \* |  |  |  |  |  | \* | \* | \* | | \* | \* |  |  |  |  |  |  |  | \* | \* | | \* |  |  |  |  |  |  |  |  |  | \* | | \* | \* |  |  |  |  |  |  |  | \* | \* | | \* | \* | \* |  |  |  |  |  | \* | \* | \* | | \* | \* | \* | \* |  |  |  | \* | \* | \* | \* | | \* | \* | \* | \* | \* |  |  | \* | \* | \* | \* | | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | \* | |