**ASSIGNMENT --2**

**LIST**

1. Print the list of numbers which are divisible by 5 and multiple of 8 between 2000 and 2500

min\_val = 2000  
max\_val = 2500  
# Check each number within the range  
for num in range(min\_val, max\_val+1):  
 if num % 5 == 0 and num % 8 == 0:  
 print(num, "is divisible by 5 and multiple of 8.")

1. Write a Python program to create the table (from 1 to 10) of a number getting input from the user

num = 12  
  
# To take input from the user  
# num = int(input("Display multiplication table of? "))  
  
# Iterate 10 times from i = 1 to 10  
for i in range(1, 11):  
 print(num, 'x', i, '=', num\*i)

1. sort the list in ascending order and print first element

# a list of strings  
programming\_languages = ["Python", "Swift","Java", "C++", "Go", "Rust"]  
  
#sort list in-place in alphabetical order  
programming\_languages.sort()  
  
#print modified list  
print(programming\_languages)  
print(programming\_languages[0])

1. Python program to find second largest number in a list

a=[]  
n=int(input("Enter number of elements:"))  
for i in range(1,n+1):  
 b=int(input("Enter element:"))  
 a.append(b)  
a.sort()  
print("Second largest element is:",a[n-2])

1. Python program to print odd numbers & even numbers separately in al list of [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

nums = [1,2,3,4,5,6,7,8,9,10]  
  
even = []  
odd = []  
  
for i in nums:  
 if (i % 2 == 0):  
 even.append(i)  
 else:  
 odd.append(i)  
  
print("Even List: ", even)  
print("Odd List: ", odd)

1. Program for Reversing a list

lists = [1, 2, 3, 4, 5]  
lists.reverse()  
print(lists)

1. Program to print all odd numbers from 1-50

start = int(input("Enter the start of range:"))  
end = int(input("Enter the end of range:"))  
  
# iterating each number in list  
for num in range(start, end + 1):  
  
 # checking condition  
 if num % 2 != 0:  
 print(num)

1. Program to count Even and odd numbers in a list

nums = [1,2,3,4,5,6,7,8,9,10]  
  
even = []  
odd = []  
  
for i in nums:  
 if (i % 2 == 0):  
 even.append(i)  
 else:  
 odd.append(i)  
  
print("Even List: ", even)  
print("Odd List: ", odd)

1. Write a python program to remove zeros from an IP address("216.08.094.196")

import re  
ip = "216.08.094.196"  
string = re.sub('\.[0]\*', '.', ip)  
print(string)

1. Write a Python program that matches a string that has an 'a' followed by anything, ending

import re  
def matching(text):  
  
 patterns = 'a.\*?b$'  
  
 if re.search(patterns, text):  
 return 'Found a match!'  
 else:  
 return('Not matched!')  
  
print(matching("aabbbb"))

1. Replace all occurences of 6 with 'six' and 10 with 'ten' for the given string 'They ate 6 apples and 10 banana'

string = "They ate 6 apples and 10 bananas"  
a=string.replace("6","six")  
b=a.replace("10","ten")  
print(b)

1. Write a program to check whether a person is eligible for voting or not. (accept age from user)

age = int(input("Enter age : "))  
  
if age >= 18:  
 print("Eligible for Voting!")  
else:  
 print("Not Eligible for Voting!")

13. Write a program to calculate the electricity bill (accept number of unit from user) according to the following criteria :

Unit Price

First 100 units no charge

Next 100 units Rs 5 per unit

After 200 units Rs 10 per unit

(For example if input unit is 350 than total bill amount is Rs2000)

unit = int(input("enter the electricity unit:"))  
if unit<=100 and unit>=0:  
 print("free electricity no need to pay")  
elif unit>100 and unit<=200:  
 a=100\*5  
 print("current bill is",a,"rupees")  
elif unit>200:  
 b=200\*10  
 print("current bill is",b,"rupees")  
else:  
 print("invalid unit")

14.Write a program to accept percentage from the user and display the grade according to the following criteria:

Marks Grade

> 90 A

> 80 and <= 90 B

>= 60 and <= 80 C

below 60

mark = int(input("enter the marks:"))  
if mark>90:  
 print("Grade A")  
elif mark>80 and mark<=90:  
 print("Grade B")  
elif mark>=60 and mark<=80:  
 print("Grade c")  
elif mark<60:  
 print("Grade D")