**Assignment - 7 Full Stack Web Development using Python MySirG Match Case**

1. Write a python script to display the number of days in a given month number.

month=int(input("enter month number "))

match month:

case month if month in (1,3,5,7,8,10,12):

print("31 days")

case month if month in (4,6,9,11):

print("30 days")

case 2:

print("28 or 29 days")

case \_:

print("invalid month number")

1. Write a menu driven program to perform following operations - Addition, Subtraction, Multiplication, Divisioprint("1.addition")

print("2.substraction")

print("3.multiplication")

print("4.division")

print("enter your choice")

choice=int(input())

match choice:

case 1:

print("enter two numbers")

a,b=int(input()),int(input())

c=a+b

print("sum is",c)

case 2:

print("enter two numbers")

a,b=int(input()),int(input())

c=a-b

print("difference is",c)

case 3:

print("enter two numbers")

a,b=int(input()),int(input())

c=a\*b

print("product is",c)

case 4:

print("enter two numbers")

a,b=int(input()),int(input())

c=a/b

print("division is",c)

3. Write a menu driven program with the following options:

a. Check whether a given set of three numbers are lengths of an isosceles triangle or not

b. Check whether a given set of three numbers are lengths of sides of a right angled triangle or not

c. Check whether a given set of three numbers are equilateral triangle or not

d. Exit.

4. Write a program which takes user’s age and display the category of person. Age below 10 years- Kid, Age below 20 - Teen, Age below 40 - young, Age below 60 - Experienced, Age above or equal 60 - Senior Citizen.

 age=int(input("enter age "))

match age :

case age if age<10:

print("kids")

case age if age<20:

print("teen")

case age if age<40:

print("young")

case age if age<60:

print("experinced")

case age if age>=60:

print("senior citizen")

5. Write a program which takes a number from user. Print Saurabh Shukla if the number is even, print Prateek Jain if the number is negative odd number and print Aditya Choudhary if number is positive odd number.

number=int(input("enter number "))

match number :

    case number if number%2==0:

        print("saurabh sukla")

    case number if number<0 and number%2:

        print("prateek jain")

    case number if number>0 and number%2:

        print("aditya chaudhary")

6. Write a python program to check whether a given string is a multiword string or single word string using match case statement s=input("enter string ")

match s:

case s if '' in s:

print("multoword string")

case s if '' not in s:

print("single word string")

7. Write a python program to check whether a given number is positive, negative or zero using match case statement n=int(input("enter number "))

match n:

case n if n>0 :

print("positive")

case n if n<0 :

print("negative")

case n if n==0:

print("zero")

8. Write a python script to check whether two given strings are identical, first string comes before the second in dictionary order or first string comes after the second string in dictionary order using match case statement s1=input("enter string 1 ")

s2=input("enter string 2 ")

match (s1,s2):

case (s1,s2)if s1==s2 :

print("identical string")

case (s1,s2) if s1>s2 :

print("{} comes after {}".format(s1,s2))

case (s1,s2) if s1<s2:

print("{} comes after {}".format(s2,s1))

9. Write a python script to check whether a given year is

a. Non century leap year

b. Century leap year

c. Non century non leap year

d. Century non leap year

10. Write a program to display day name on the basis of user’s liking of a colour. Ask user for his favorite colour. User can answer in a sentence like “I like red colour”. Assuming all colour name entered by user is in lowercase. Use match case to display day name associated with the colour.

a. Yellow - Monday

b. Blue - Tuesday

c. Orange - Wednesday

d. White - Thursday

e. Black - Friday

f. Red - Saturday

g. All other colours - Sunday

s1=input("what is your faviourate colour ")

l1=["yellow","blue","black","orange","white","red"]

for colour in l1:

if colour in s1:

c=colour

break

else:

c="other"

match c:

case "yellow":

print("monday")

case "blue":

print("tuesday")

case "black":

print("wednesday")

case "orange":

print("thursday")

case "white":

print("friday")

case "red":

print("saturday")

case "other":

print("sunday")