Assignment - 7 Match Case

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

```
x=int(input("enter month value in numeric value  \n"))
match x:
   case x if x in (1,3,5,7,8,10,12):
      print("days are 31")
   case x if x in (4,6,9,11):
      print("days are 30" )
   case x if x==2:
      print("days are 28 or 29")
   case _:
      print("wrong value ")
```

2. Write a menu driven program to perform following operations - Addition, Subtraction, Multiplication, Division.

```
while(1):
   print("1  addition")
   print("2  substraction")
   print("3   multiplication")
   print("4  complete division")
   print("5  flor divison")
   x=int(input("enter the num between 1-4\n"))
   match x:
      case 1:
         a=int(input("enter the number   "))
         b=int(input("enter the number   "))
         print(a+b)
         print()
      case 2:
         a=int(input("enter the number   "))
         b=int(input("enter the number   "))
         print(a-b)
         print()
      case 3:
         a=int(input("enter the number   "))
         b=int(input("enter the number   "))
         print(a*b)
         print()
      case 4:
         a=int(input("enter the number   "))
         b=int(input("enter the number   "))
         print(a/b)
         print()
      case 5:
         a=int(input("enter the number   "))
         b=int(input("enter the number   "))
         print(a//b)
         print()
      case _:
         print("defalut")
```

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

```
ile(1):
    print("1 An isosceles triangle or not\n")
    print("2 Right angled triangle or not\n")
    print("3 Equilateral triangle or not\n")
    print("4  Exit")
    x=int(input("enter your choice 1-4\n"))
    match x:
        case 1 :
            a,b,c=int(input("enter three length\n ")),int(input()),int(input())
            if (a==b or a==c or b==c):
                print("isosceles triannngle length \n")
            else:
                print(" not isosceles triangle length \n")
            print()
        case 2:
            a,b,c=int(input("enter three side\n ")),int(input()),int(input())
            if c**2==a**2+b**2:
                print("length of right angled triangle\n")
            else:
                print("not length of right angled triangle\n")
            print()
        case 3:
            a,b,c=int(input("enter three  number\n ")),int(input()),int(input())
            if a==b and a==c and b==c:
                print("equilateral triangle \n")
            else:
                print("not equilateral triangle\n ")
        case 4:
            exit()
        case _:
            print("defalut")
```

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.

```
x=int(input("enter the num  "))
match x:
    case x if x<10:
        print("kid")
        print()
    case x if x>=10 and x<20:
        print("Teen")
        print()
    case x if x>=20 and x<40:
        print("Young")
        print()
    case x if x>=40 and x<60:
        print("Experienced")
```

```
        print()
    case x if x>=60:
        print("Senior Citizen")
    case _:
        print("invalid enter number")
```

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.

```
x=int(input("enter the num\n  "))
match x:
    case x if x%2==0:
        print("Saurabh Shukla")
        print()
    case x if x<0 and x%2!=0:
        print("Prateek Jain")
        print()
    case x if x>0 and x%2!=0:
        print("Aditya Choudhary")
        print()
    case _:
        print("default")
```

6. Write a python program to check whether a given string is a multiword string or single word string using match ca se statement.

```
s1=str(input("enter the strings  \n"))
s2=s1.strip()
match s2:
    case  s2 if ' ' in s2:
        print("\nmulti word string \n")
    case s2  if ' ' not in s2:
        print("\nsingle word string ")
    case _:
        print("default")
```

7. Write a python program to check whether a given number is positive, negative or zero using match case statement.

```
x=int(input("enter the num  "))
match x:
    case x if x>0:
        print("positive")
        print()
    case x if x==0:
        print("zero")
        print()
    case x if x<0:
        print("negative")
```

```
        print()
    case _:
        print("default")
```

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.

```
w1=str(input("enter the word  "))
w2=str(input("enter the word  "))
match (w1,w2):
    case (w1,w2) if w1<w2:
        print("{} comes before this {}\n ".format(w1,w2),w1,w2)
        print()
    case (w1,w2) if w1>w2:
        print("{} comes after this {} \n".format(w1,w2) ,w2,w1)
        print()
    case (w1,w2) if w1==w2:
        print("strings are identical")
    case _ :
        print("default")
```

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

```
y=int(input("enter the year   "))
if y%100==0:
    if y%400==0:
        print("century leap year")
    else:
        print("century not leap year")
else:
    if y%4==0:
        print("non century leap year")
    else:
        print(" Non 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("enter your favourite colour\n   ")
list=["yellow","blue","orange","white","black","red"]
for x in list:
    if x in s1:
        colour=x
        break
    else:
        colour="other"
match colour:
    case "yellow":
        print("Monday")
    case "blue":
        print("Tuesday")
    case "orange":
        print("Wednesday")
    case "white":
        print("Thursday")
    case "black":
        print("Friday")
    case "red":
        print("Saturday")
    case "other":
        print("Sunday")
print()
```