Assignment 1

Match case

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@ Write a python script to display the number of
   dage in given month number:
m= int(input('Enter a month number: (n"))
match m:
    Case 1: print ('Number of days = 31')
   Case 2: proint ('Number of days = 28')
   Case 3: print ('Number of days = 31')
   case 4: print ( Number of days = 30)
  case 5: print (Womber of days = 311)
   case 6: print ('Number of days = 30')

raint ('Number of days = 31')
   case of print ('Number of days = 31')
   case 9: print (Number of days = 301)
  case (1: print ('Number of days = 301)

case (1: print ('Number of days = 301)
    cass 12: print ('Wumber of days = 31')
2. Write a menu driven program to perform following operations. Addition, Subtraction, Multiplic
   ation, pirision.
n1, n2= int(input ("Enter two number: It")), int(input())
op = input ('Enter the operation: 14')
match op:
     case 't': print (n1+n2)
     case -1: print (n1-n2)
     case '+': print (n1 + n2)
    case 11: print(n1/n2)
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# 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 your age:\t'))
if age<10 and age>0:
    print('You are kid')
elif age<20 and age>=10:
    print('You are Teen')
elif age<40 and age>=20:
    print('You are young')
elif age<60 and age>=40:
    print('You are exprienced')
elif age>60:
    print('You are senior citizen')
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# 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.
n1, n2, n3 = eval(input('enter three number:')), eval(input()), eval(input())
print('1. Check whether the given set of 3 numbers are length of an isoscele triangle or not')
print('2. Check whether the given set of 3 numbers are length of an right angle triangle or not')
print('3. Check whether the given set of 3 numbers are equilateral triangle or not')
print('4. EXIT')
ch = int(input('Enter your choice'))
match ch:
    case 1:
        if(n1 == n2 \text{ or } n2 == n3 \text{ or } n3 == n1):
             print('This is an isosceles triangle')
        else:
             print('This is not an isosceles triangle')
    case 2:
        if(n1^{**}2 + n2^{**}2 == n3^{**}2 \text{ or } n2^{**}2 + n3^{**}2 == n1^{**}2 \text{ or } n1^{**}2 + n3^{**}2 == n2^{**}2):
             print('This is an right angle triangle')
        else:
             print('This is not an right angle triangle')
    case 3:
        if(n1 == n2 and n2 == n3):
            print('This is an equileteral triangle')
        else:
             print('This is not an equileteral triangle')
    case 4:
        quit()
    case :
        print('Invalid choice....')
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# 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 a string:\t')
1=len(s)
match 1:
    case 1:
        print('This is single word string')
    case :
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print('This is a multiword string')

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

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# Choudhary if number is positive odd number.
num=int(input('Enter a number:'))
match num%2==0:
    case 1:
        print('Saurabh Shukla')
    case 0:
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match num%2!=0 and num<0: case 1: print('Prateek Jain') case 0: print('Aditya Choudhary')

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# 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
first=input('Enter first string:\t')
second=input('Enter second string:\t')
match first>second:
    case 1:
        print('Second strign comes before the first string')
    case 0:
        match second>first:
            case 1:
                print('The frst string comes before the second tring')
            case 0:
                print('The strings are identical')
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# 7. Write a python program to check whether a given number is positive, negative or
# zero using match case statement
    case 1:
        print('The number is positive')
    case 0:
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n=int(input('Enter a number:\t')) match n>0:

print('The number is negative')

print('This is zero')

case 0:

match n<0: case 1:

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# 10. Write a program to display day name on the basis of user's liking of a colour. Ask
# user for his favourite 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
       c. Orange - Wednesday
       d. White - Thursday
       e. Black - Friday
       f. Red - Saturday
        g. All other colours - Sunday
cl=input('enter your fevourite crolor:\t')
match 'yellow' in cl:
    case 1:
        print('monday')
    case 0:
        match 'blue' in cl:
            case 1:
                print('tuesday')
            case 0:
                match 'orange' in cl:
                    case 1:
                        print('wednesday')
                    case 0:
                        match 'whita' in cl:
                            case 1:
                                 print('thursday')
                            case 0:
                                 match 'black' in cl:
                                     case 1:
                                         print('friday')
                                     case 0:
                                         match 'red' in cl:
                                             case 1:
                                                 print('saturday')
                                             case 0:
                                                 print('sunday')
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# 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 a year:\t')))
match v % 100 != 0 and v % 4 == 0:
    case 1:
        print('Non century leap year')
    case 0:
        match y % 100 == 0 and y % 400== 0:
            case 1:
                print('Centuary leap year')
            case 0:
                match y % 100 != 0 and y % 4 != 0:
                    case 1:
                        print('Non centuary non leap year')
                    case 0:
                        print('Centuary non leap year')
```