

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

```
x=int(input("enter month number"))
match x:
    case 1:
        print("31 days")
    case 2:
        print("28 or 29 days")
    case 3:
        print("31 days")
    case 4:
        print("30 days")
    case 5:
        print("31 days")
    case 6:
        print("30 days")
    case 7:
        print("31 days")
    case 8:
        print("31 days")
    case 9:
        print("30 days")
    case 10:
        print("31 days")
    case 11:
        print("30 days")
    case 12:
        print("31 days")
    case _:
        print("wrong month number")
```

2. write a menu driven program to perform following operations- Addition,subtraction,multiplication,division.

```
print("enter 1 for addition")
print("enter 2 for subtraction")
print("enter 3 for multiplication")
print("enter 4 for division")
x=int(input("enter your choice"))
match x:
    case 1:
        a=int(input("enter first number"))
        b=int(input("enter second number"))
        print(a+b)
    case 2:
        a=int(input("enter first number"))
        b=int(input("enter second number"))
        print(a-b)

    case 3:
```

```
a=int(input("enter first number"))
b=int(input("enter second number"))
print(a*b)
```

case 4:

```
a=int(input("enter first number"))
b=int(input("enter second number"))
print(a/b)
```

case _:

```
print("wrong choice")
```

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

- check whether a given set of three numbers are lengths of an isosceles triangle or not.
- check whether a given set of three numbers are lengths of sides of a right angled triangle or not
- check whether a given set of three numbers are equilateral triangle or not.
- Exit

```
print("enter 1 to check whether a given set of three numbers are lengths of an isosceles triangle or not")
print("enter 2 to check whether a given set of three numbers are lengths of sides of a right triangle or not")
print("enter 3 to check whether a given set of three numbers are equilateral triangle or not")
print("enter 4 to exit")
```

```
x=int(input("enter your choice"))
```

```
match x:
```

```
case 1:
```

```
a=int(input("enter first number"))
b=int(input("enter second number"))
c=int(input("enter third number"))
if a==b or a==c or b==c:
    print("isosceles triangle lengths")
```

```
else:
```

```
    print("not isosceles triangle lengths")
```

```
case 2:
```

```
a=int(input("enter first number"))
b=int(input("enter second number"))
c=int(input("enter third number"))
if c**2==a**2+b**2:
    print("lengths of a right angled triangle")
```

```
else:
```

```
    print("not the lengths of right angled triangle")
```

```
case 3:
```

```
a=int(input("enter first number"))
b=int(input("enter second number"))
c=int(input("enter third number"))
if a==b and a==c and b==c:
    print("equilateral triangle")
```

```
else:
```

```
        print("not equilateral triangle")
case 4:
    exit()
case _:
    print("wrong choice")
```

4. write a program which takes user's age and display category of a person. Age below 10 years-kid, Age below 20-teen, Age below 40-young, Age below 60-experienced, Age equal to or above 60-senior citizen.

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

6. write a python program to check whether a given string is a multiword string or single word string using match case statement.

```
s1=str(input("enter the string"))
s2=s1.strip()
match s2:
    case s2 if ' ' in s2:
        print("multi word string")
    case s2 if ' ' not in s2:
        print("single 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 number "))
match x:
    case x if x>0:
        print("positive")
    case x if x==0:
        print("zero")
    case x if x<0:
        print("negative")
    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 {}".format(w1,w2),w1,w2)
    case (w1,w2) if w1>w2:
        print("{} comes after this {}".format(w1,w2),w2,w1)
    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
- non century leap year
 - century leap year
 - non century not leap year.
 - 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 favourite colour. user can answer in a sentence like " i like red colour". assuming all colour name entered by user in a lowercase. use match case to display day name associated with the colour.

- yellow-monday
- Blue-tuesday
- orange-wednesday
- white-thursday
- Black-friday
- Red-saturday
- All other colours-sunday

```
s1=input("enter your favourite colour")
match s1:
    case " i like yellow":
        print("Monday")
    case "i like blue":
        print("Tuesday")
    case "i like orange":
        print("Wednesday")
    case "i like white":
        print("Thursday")
    case "i like black":
        print("Friday")
    case "i like red":
        print("Saturday")
    case _:
```

```
print("sunday")
```