Conditional statements:

In python there are majorly four conditional statements:

1. if-statement
2. if-else statement
3. elif statement
4. nested if statements

Indentation is uesd to denote a block of code to be excuted under a statements or loops in python.

where as in c we use open brace "{" and closing brace "}".

1.if-statement

```
#if-statement
#syntax
if condition:
    statement
```

In [2]:

```
#Ex: if-statement
n=int(input())
if n%2==0:
    print("even no",n)
```

```
56
even no 56
```

2. if-else statement

```
#if-else statement
#syntax
if condition:
    statement
else :
    statement
```

In [4]:

```
#Ex: if-else
n=int(input())
if n%2==0:
    print("even no",n)
else :
    print("odd no",n)
```

```
35
odd no 35
```

In [6]:

```python
# large of two no's
a,b=int(input()),int(input())
if a>b:
    print('a is big')
else:
    print(' b is big')
```

```
200
400
 b is big
```

In [10]:

```python
# large of three no's
a,b,c=map(int,input().split())
if a>b and a>c:
    print('a is big')
if b>c:
    print('b is big')
else:
    print('c is big')
```

```
2 3 4
c is big
```

In [17]:

```python
#Leap year
y=int(input())
if (y%400==0) or (y%4==0 and y%100!=0) :
    print('leap year',y)
else:
    print('not leap year',y)
```

```
2020
leap year 2020
```

3.elif statement

```
#elif statement
#syntax
if condition:
    statement
elif condition:
     statement
else condition:
     statement
```

In [12]:

```python
#large of three no's
a,b,c=map(int,input().split())
if a>b and a>c:
    print('a is big')
elif b>c:
    print('b is big')
else:
    print('c is big')
```

```
200 300 400
c is big
```

In [18]:

```python
# to identify the given character
n=input('enter a character')
if (n>='a'and n<='z') or (n>='A' and n<='Z'):
    print('alphabet is',n)
elif (n>='0' and n<='9'):
    print('digit is',n)
else:
    print('special character',n)
```

```
enter a character@
special character @
```

In [19]:

```python
# to guess the correct choice
choice=input()
if choice=='a':
    print('bad guess')
elif choice=='b':
    print('close,but not correct')
elif choice=='c':
    print('good guess')
else:
    print('invalid')
```

```
c
good guess
```

In [21]:

```python
#TASK-1
# grades given to marks
m=int(input())
if m>=80 and m<=100:
    print('a grade')
elif m>=70 and m<=79:
    print('b grade')
elif m>=60 and m<=69:
    print('c grade')
elif m>=45 and m<=59:
    print('d grade')
else :
    print('fail')
```

```
100
a grade
```

In [22]:

```python
# my days in a week
choice=int(input())
if choice==1:
    print('sam day')
elif choice==2:
    print('sadhik day')
elif choice==3:
    print('rk day')
elif choice==4:
    print('raghu day')
elif choice==5:
    print('dhakshi day & puji day')
elif choice==6:
    print('sowrabha & sneha day')
elif choice==7:
    print('surya vamsi day')
else:
    print('PUBG DAY')
```

```
0
PUBG DAY
```

In [ ]:

```python
# days in a week
choice=int(input())
if choice==1:
    print('MONDAY')
elif choice==2:
    print('TUESDAY')
elif choice==3:
    print('WEDNESDAY')
elif choice==4:
    print('THURSDAY')
elif choice==5:
    print('FRIDAY')
elif choice==6:
    print('SATURDAY')
elif choice==7:
    print('SUNDAY')
else:
    print('PUBG DAY')
```

In [28]:

```python
#TASK-2
#arithmatic operators
a=int(input())
b=int(input())
print("1.add 2. sub 3. mul")
choice=int(input())
if choice==1:
    print('sum is',a+b)
elif choice==2:
    print('sub is',a-b)
elif choice==3:
    print('mul is',a*b)
```

```
200
300
1.add 2. sub 3. mul
3
mul is 60000
```

4.nested if

```python
# nested if
#syntax
if condition:
    statement
    if condition:
        statement
    elif condition:
        statement
    else:
        statement
else:
    statement
```

In [24]:

```python
n=int(input())
if n%2==0:
    if n<5:
        print(n**2)
    else:
        print(n**3)
else:
    print('odd')
```

```
22
10648
```

In [30]:

```python
#task3
uid=int(input())
if uid>=50 and uid<=100:
    pwd=int(input())
    if pwd==9000:
        print('welcome')
    else:
        print('invalid password')
else:
    print('invalid username')
```

```
20
invalid username
```

In [ ]: