In [ ]:

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Conditional Statements:

- we have following conditional statements:
  1. simple if
  2. if else
  3. if else ladder
  4. Nested if

Indentation : It refers to particular block of code.

1.simple if

```
if condition:
    // statements
```

In [26]:
```
a=input("enter a:")

if type(eval(a))==int:
    print("This is Integer")
```

executed in 2.60s, finished 15:10:02 2024-08-08

```
enter a:10.7
```

In [28]:
```
a=input("enter a:")

if type(eval(a))==int:
    print("This is Integer")
else:
    print("This is Not an Integer")
```

executed in 1.73s, finished 15:10:41 2024-08-08

```
enter a:10.8
This is Not an Integer
```

In [34]:
```
a=input("enter a:")

if type(eval(a))==int:
    print("This is Integer")
elif type(eval(a))==float:
    print("This is Float")
elif type(eval(a))==bool:
    print("This is Boolean Value")
else:
    print("This is string")
```

executed in 3.23s, finished 15:12:58 2024-08-08

```
enter a:True
This is Boolean Value
```

In [35]:
```
num=int(input("enter the value:"))

if num>0:
    if num>10:
        if num>100:
            print("number is greater than 100")
        else:
            print("The Number is less than 100")
    else:
        print("The Number is less than 10")
else:
    print("The Number is less than Zero")
```

executed in 33.6s, finished 15:22:51 2024-08-08

```
enter the value:56
The Number is less than 100
```

In [39]:
```
name=input("Enter Name:")
age=int(input("Enter Age:"))
marks=int(input("Enter Marks:"))

print("="*50)

if name[0]=="s" or name[0]=="S":
    if age>=24 and age<=45:
        if marks>=80:
            print("He is eligible for this Job")
        else:
            print("Not eligible for this job")
    else:
        print("Not eligible for this job")
else:
    print("Not eligible for this job")
```

executed in 4.78s, finished 15:37:04 2024-08-08

```
Enter Name:Sham
Enter Age:43
Enter Marks:97
==================================================
He is eligible for this Job
```

6)Check if a given number is divisible by 2,3 and 4

7)Write a program that takes a student's score as input and prints the ir grade based on the following criteria:

90 and above: A
80-89: B
70-79: C
60-69: D
Below 60: F
8)Write a program that determines whether a given year is a leap year. A leap year is either divisible by 4 but not by 100, or divisible by 4 00
9)Write a program that takes three numbers as input and prints the lar gest among them.
10)Write a program that takes a single character as input and prints w hether it is a vowel or a consonant.
11)Write a program that takes a person's age as input and prints wheth er they are an infant, child, teenager, adult, or senior.
12)Write a program that takes three angles as input and prints whether a triangle with those angles is acute, obtuse, or right-angled.
13)Write a program that takes a person's age as input and prints the t icket price based on the following criteria:

0-5 years: Free
6-12 years: ₹50
13-18 years: ₹100
19-60 years: ₹150
61 years and above: ₹80

In [45]:
```
num1=int(input("enter Val1:"))
num2=int(input("Enter Val2:"))
print("="*50)

print("Options")
print("1.Addition\n 2.Substraction\n 3.Multiplication\n 4.Division")


print("="*50)

option=int(input("enter Choice:"))

if option==1:
    res=num1+num2
elif option==2:
    res=num1-num2
elif option==3:
    res=num1*num2
elif option==4:
    if num2!=0:
        res=num1/num2
    else:
        res="Infinite"
        print("Denominator should not be zero")
else:
    print("Invalid Option")

print("result is {}".format(res))
```

executed in 13.0s, finished 15:57:34 2024-08-08

```
enter Val1:10
Enter Val2:20
==================================================
Options
1.Addition
 2.Substraction
 3.Multiplication
 4.Division
==================================================
enter Choice:2
result is -10
```

In [ ]: