

## lab 4

In [1]:

```
#program no:1
a=400
b=500
if a==400:
    print("The value of a is equal to 400")
if a<b:
    print("The value of a is less than b")
if a>b:
    print("The value of a is greater than b")
if a!=b:

    print("The value of a is not equal to b")
if a<=b:
    print("The value of a is less than or equal to b")
if a>=b:
    print("The value of a is greater than or equal to b")
```

The value of a is equal to 400  
The value of a is less than b  
The value of a is not equal to b  
The value of a is less than or equal to b

In [2]:

```
#program no:1
a=500
b=400
if a==400:
    print("The value of a is equal to 400")
if a<b:
    print("The value of a is less than b")
if a>b:
    print("The value of a is greater than b")
if a!=b:

    print("The value of a is not equal to b")
if a<=b:
    print("The value of a is less than or equal to b")
if a>=b:
    print("The value of a is greater than or equal to b")
```

The value of a is greater than b  
The value of a is not equal to b  
The value of a is greater than or equal to b

In [3]:

```
#problem no:2
a=10
b=5
c=20
if a>b and c>a:
    print("Both conditions are true")
```

Both conditions are true

In [4]:

```
#problem no:3
a=105
b=50
c=200
if a>b and c>a:
    print("At least one of the condition are true")
```

At least one of the condition are true

In [16]:

```
#problem no:4
#python program to display all the prim number within an interval
l_limit=int(input("Enter lower limit range:"))
u_limit=int(input("Enter lower upper range:"))
print("Prime number between ",l_limit,"and",u_limit,"are:")
for number in range(l_limit,u_limit+1):

    if number>1:

        for i in range(2,number):
            if(number%i)==0:
                break
        else:
            print(number)
```

Enter lower limit range:5  
Enter lower upper range:50  
Prime number between 5 and 50 are:

In [15]:

```
#problem no:5
initial_value=eval(input("Enter the initial value for the range"))
final_value=eval(input("Enter the final value for the range:"))
number=range(initial_value,final_value)
sum=0
for value in number:
    sum=sum+value

print ("The sum is ",sum)
```

Enter the initial value for the range:2  
Enter the final value for the range:27  
The sum is 350



In [22]:

```
#problem no 8
print("\t\t\t ASCII Character")
for i in range(0,256):
    print(i, "=",chr(i),end="\t")#end"\t" is used to place a tab after the displayed steing in
print("\n")
```

ASCII Character

0 =

1 = □

2 = □

3 = □

4 = □

5 = □

6 = □

7 = □

8 =

^

In [25]:

```
#problem no 9
print("Python program to convert decimal number into binary,octal and hexadecimal number sy

for i in range(0,17):
    print("The decimal value of",i,"is:","in binary its:",bin(i),"in octal its:",oct(i),"ar
print("That's the end of the program with range from 1 to 16")
```

Python program to convert decimal number into binary,octal and hexadecimal number system

The decimal value of 0 is: in binary its: 0b0 in octal its: 0o0 and in Hexadecimal its:Hexadecimal its: 0x0

The decimal value of 1 is: in binary its: 0b1 in octal its: 0o1 and in Hexadecimal its:Hexadecimal its: 0x1

The decimal value of 2 is: in binary its: 0b10 in octal its: 0o2 and in Hexadecimal its:Hexadecimal its: 0x2

The decimal value of 3 is: in binary its: 0b11 in octal its: 0o3 and in Hexadecimal its:Hexadecimal its: 0x3

The decimal value of 4 is: in binary its: 0b100 in octal its: 0o4 and in Hexadecimal its:Hexadecimal its: 0x4

The decimal value of 5 is: in binary its: 0b101 in octal its: 0o5 and in Hexadecimal its:Hexadecimal its: 0x5

The decimal value of 6 is: in binary its: 0b110 in octal its: 0o6 and in Hexadecimal its:Hexadecimal its: 0x6

The decimal value of 7 is: in binary its: 0b111 in octal its: 0o7 and in Hexadecimal its:Hexadecimal its: 0x7

The decimal value of 8 is: in binary its: 0b1000 in octal its: 0o10 and in Hexadecimal its:Hexadecimal its: 0x8

The decimal value of 9 is: in binary its: 0b1001 in octal its: 0o11 and in Hexadecimal its:Hexadecimal its: 0x9

The decimal value of 10 is: in binary its: 0b1010 in octal its: 0o12 and in Hexadecimal its:Hexadecimal its: 0xa

The decimal value of 11 is: in binary its: 0b1011 in octal its: 0o13 and in Hexadecimal its:Hexadecimal its: 0xb

The decimal value of 12 is: in binary its: 0b1100 in octal its: 0o14 and in Hexadecimal its:Hexadecimal its: 0xc

The decimal value of 13 is: in binary its: 0b1101 in octal its: 0o15 and in Hexadecimal its:Hexadecimal its: 0xd

The decimal value of 14 is: in binary its: 0b1110 in octal its: 0o16 and in Hexadecimal its:Hexadecimal its: 0xe

The decimal value of 15 is: in binary its: 0b1111 in octal its: 0o17 and in Hexadecimal its:Hexadecimal its: 0xf

The decimal value of 16 is: in binary its: 0b10000 in octal its: 0o20 and in Hexadecimal its:Hexadecimal its: 0x10

That's the end of the program with range from 1 to 16

In [26]:

#Program No 10

```

n=5;
for i in range(n):
    for j in range(i):
        print('*',end=" ")
    print("")

for i in range(n,0,-1):
    for j in range(i):
        print('*',end=" ")
    print("")

```

```

*
**
***
****
*****
****
***
**
*

```

In [30]:

#Program No 11

```

print("This program will count toatal number of vowels from user defined sentence")
string=input("enter your string:")
vowels=0
for i in string:
    if(i=='a' or i=='e' or i=='i' or i=='o' or i=='u' or i=='A' or i=='E' or
i == 'I' or i=='O' or i=='U'):vowels=vowels+1
print("Number of vowels are:")
print(vowels)

```

This program will count toatal number of vowels from user defined sentence  
enter your string:Quide Azam Muhammad Ali Jinnah  
Number of vowels are:  
12

In [ ]: