

## # Karanjot Singh

In [12]:

```
import math
import random
l = [4,3,77,2,3,1]
print(abs(-0.5))
print(pow(2,4))
print(min(5,4,7,6,2,9,10))
print(max(9,55,4,77,24,0.2))
print(math.ceil(5.5))
print(math.floor(5.5))
print(math.factorial(6))
print(math.fsum(l))
print(math.exp(4))
print(math.log10(2))
print(math.pow(4,3))
print(math.sqrt(124))
print(math.sin(math.radians(30)))
print(math.cos(math.radians(30)))
print(math.tan(math.radians(30)))
print(random.choice(l))
print(random.shuffle(l))
print(random.random())
print(random.randrange(1,40))
```

```
0.5
16
2
77
6
5
720
90.0
54.598150033144236
0.3010299956639812
64.0
11.135528725660043
0.49999999999999994
0.8660254037844387
0.5773502691896257
4
None
0.19694116108855098
3
```

In [19]:

```
import math

# For 0 Degree
print(math.sin(0))
print(math.cos(0))
print(math.tan(0))
print()
print(math.sin(math.radians(0)))
print(math.cos(math.radians(0)))
print(math.tan(math.radians(0)))
print()

# For 30 Degree
print(math.sin(30))
print(math.cos(30))
print(math.tan(30))
print()
print(math.sin(math.radians(30)))
print(math.cos(math.radians(30)))
print(math.tan(math.radians(30)))
print()

# For 45 Degree
print(math.sin(45))
print(math.cos(45))
print(math.tan(45))
print()
print(math.sin(math.radians(45)))
print(math.cos(math.radians(45)))
print(math.tan(math.radians(45)))
print()

# For 60 Degree
print(math.sin(60))
print(math.cos(60))
print(math.tan(60))
print()
print(math.sin(math.radians(60)))
print(math.cos(math.radians(60)))
print(math.tan(math.radians(60)))
print()

# For 90 Degree
print(math.sin(90))
print(math.cos(90))
print(math.tan(90))
print()
print(math.sin(math.radians(90)))
print(math.cos(math.radians(90)))
print(math.tan(math.radians(90)))
print()
```

0.0  
1.0  
0.0

0.0  
1.0  
0.0

-0.9880316240928618  
0.15425144988758405  
-6.405331196646276  
  
0.49999999999999994  
0.8660254037844387  
0.5773502691896257  
  
0.8509035245341184  
0.5253219888177297  
1.6197751905438615  
  
0.7071067811865476  
0.7071067811865476  
0.9999999999999999  
  
-0.3048106211022167  
-0.9524129804151563  
0.320040389379563  
  
0.8660254037844386  
0.5000000000000001  
1.7320508075688767  
  
0.8939966636005579  
-0.4480736161291701  
-1.995200412208242  
  
1.0  
6.123233995736766e-17  
1.633123935319537e+16

In [17]:

```
x1 = int(input("Enter The value of X1: "))
y1 = int(input("Enter The value of Y1: "))
x2 = int(input("Enter The value of X2: "))
y2 = int(input("Enter The value of Y2: "))
distance = (x2-x1)*(y2-y1)
print("Distance is :",distance)
```

Enter The value of X1: 2  
Enter The value of Y1: 5  
Enter The value of X2: 4  
Enter The value of Y2: 8  
Distance is : 6

In [15]:

```
import random
Sum = 0
for i in range(0,10):
    rno = random.random()*100
    print(rno)
    Sum = Sum + rno
print("sum is:",Sum)
```

```
89.09553471369985
58.82059209166617
65.92586738463704
12.776269437190768
69.69296522745219
35.014534931325954
94.55503709046383
71.61901977075532
88.2856053957104
5.810211320728776
sum is: 591.5956373636302
```

In [24]:

```
import math
radius = int(input("Enter the Radius of Circle:"))
area = math.pi*radius**2
print("Area Of Circle is :",area)
```

```
Enter the Radius of Circle:13
Area Of Circle is : 530.929158456675
```