In [3]:
```
#Functions
def greetings():
    print('Hi how are you?')
    print("welocme abroad")

print('start')
greetings()
print('Finish')
```

```
start
Hi how are you?
welocme abroad
Finish
```

In [4]:
```
greet()
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-4-db845682bfe7> in <module>
----> 1 greet()

NameError: name 'greet' is not defined
```

In [5]:
```
#parameter
def greetings(name):
    print(f'Hi {name}!')
    print('welcome')

print('start')
greetings("neelam")
print("Finish")
```

```
start
Hi neelam!
welcome
Finish
```

In [ ]:
```
def greeting(firstname = "nice", lastname = "neelam"):
```

In [6]:
```
#return statemnt
def square (x):
    return x * x
```

In [7]:
```
result = square(9)
print(result)
```

```
81
```

In [8]:
```
#Excetions
#exit code 0 means success
#exit code 1 or any other number is an error

#if error: value error displays
```

In [11]:
```
age = int(input('Age:'))
print(age)
```

```
Age:nine

---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-11-a3ccad679065> in <module>
----> 1 age = int(input('Age:'))
      2 print(age)

ValueError: invalid literal for int() with base 10: 'nine'
```

In [13]:
```
try:
    age = int(input('Age:'))
    print(age)
except ValueError:
    print('Invalid value - please type in integer')
```

```
Age:nine
Invalid value - please type in integer
```

In [18]:
```
try:
    age = int(input('Age:'))
    income = 20000
    risk = income/age
    print(age)
except ZeroDivisionError:
    print("Age cannot be Zero")
except ValueError:
    print('Invalid value - please type in integer')
```

```
Age:10
10
```

In [19]:
```
risk
```

Out[19]:
```
2000.0
```

In [21]:
```
#Class

class mouse:
    def move(self):
        print("move")

    def draw(self):
        print('draw')


p1 = mouse()
p1.x = 10
p1.y = 20
print(p1.x)
p1.draw()

p2 = mouse()
p2.x = 1
print(p2.x)
```

```
10
draw
1
```

In [27]:
```
#Constructors
class mouse:
    def __init__(self,x,y):
        self.x = x
        self.y = y

    def move(self):
        print("move")

    def draw(self):
        print('draw')


p1 = mouse(10,20)
print(p1.x)
```

```
10
```

In [31]:
```
#Generating Random Values
import random

#print(random.randint(1,9))

for i in range(2):
    print(random.random())
```

```
0.1617970638777495
0.05878922886685922
```

In [39]:
```
#Dice roll

import random

class dice:
    def roll(self):
        first = random.randint(1,6)
        second = random.randint(1,6)
        return first, second


d = dice()
print(d.roll())
```

```
(6, 5)
```

In [ ]:

In [ ]: