

## Average of three numbers

```
In [5]: a=10
b=20
c=30
d=(a+b+c)/3
print(d)
print(type(a))
print(type(b))
print(type(c))
print(type(d))
```

```
20.0
<class 'int'>
<class 'int'>
<class 'int'>
<class 'float'>
```

## Multiplication of three numbers( STATIC)

```
In [10]: a=5
b=10
c=a*b
print(c)
print(type(a))
print(type(b))
print(type(c))
print(type(d))
```

```
50
<class 'int'>
<class 'int'>
<class 'int'>
<class 'float'>
```

## Addition of three numbers (Dynamic)

```
In [14]: a=int(input("enter the variable"))
b=int(input("enter the variable"))
c=a+b
print(c)
print(type(b))
```

```
enter the variable5
enter the variable6
11
<class 'int'>
```

## Multiplication of three numbers (dynamic)

```
In [17]: a=int(input("enter the variable"))
b=int(input("enter the variable"))
c=int(input("enter the variable"))
d=a*b*c
print(d)
print(type(d))
```

```
enter the variable9
enter the variable9
enter the variable9
729
<class 'int'>
```

## Type Conversions

Convert int to float

```
In [20]: a=10
print(type(a))
b=float(a)
print(b)
print(type(b))
```

```
<class 'int'>
10.0
<class 'float'>
```

Convert float to int

```
In [22]: a=100.23
print(type(a))
b=int(a)
print(b)
print(type(b))
```

```
<class 'float'>
100
<class 'int'>
```

Convert int to string

```
In [30]: a=45
print(a)
print(type(a))
b=str(a)
print(b)
print(type(b))
```

```
45
<class 'int'>
45
<class 'str'>
```

convert float to string

```
In [29]: a=45.5
print(a)
print(type(a))
b=str(a)
print(b)
print(type(b))
```

```
45.5
<class 'float'>
45.5
<class 'str'>
```

convert int to boolean

```
In [32]: a=10
print(a)
print(type(a))
b=bool(a)
print(b)
print(type(b))
```

```
10
<class 'int'>
True
<class 'bool'>
```

Convert String to int

```
In [37]: a="45"
print(a)
print(type(a))
b=int(a)
print(b)
print(type(b))
```

```
45
<class 'str'>
45
<class 'int'>
```

## Convert String to boolean

```
In [40]: a="45"  
print(a)  
print(type(a))  
b=bool(a)  
print(b)  
print(type(b))
```

```
45  
<class 'str'>  
True  
<class 'bool'>
```

## Convert String to float

```
In [41]: a="45"  
print(a)  
print(type(a))  
b=float(a)  
print(b)  
print(type(b))
```

```
45  
<class 'str'>  
45.0  
<class 'float'>
```

## Boolean Example

```
In [49]: a=2  
b=10  
c=a>b  
b=float(c)  
print(c)
```

```
False
```

## Convert boolean to int

```
In [53]: a=45
b=50
c=a>b
print(c)
print(type(c))
d=int(bool(c))
print(d)
print(type(d))
```

```
False
<class 'bool'>
0
<class 'int'>
```

Convert boolean to float

```
In [54]: a=10
b=5
c=a>b
print(c)
print(type(c))
d=float(bool(c))
print(d)
print(type(d))
```

```
True
<class 'bool'>
1.0
<class 'float'>
```

Convert boolean to string

```
In [55]: a=10
b=5
c=a>b
print(c)
print(type(c))
d=str(bool(c))
print(d)
print(type(d))
```

```
True
<class 'bool'>
True
<class 'str'>
```

```
In [8]: f=open('Desktop//ganesh.txt','r')
print(f.read())
```

Now the file has more content!

```
In [7]: f = open("Desktop//ganesh.txt", "w")
f.write("Now the file has more content!")
f.close()
f = open("Desktop//ganesh.txt", "r")
print(f.read())
```

Now the file has more content!

```
In [9]: f=open('myfile1.txt','x')
```

```
In [14]: f=open('myfile1.txt','w')
f.write('Now I opened this file by writing a code instead of not manually.')
f.close()
f=open('myfile1.txt','r')
print(f.read())
```

Now I opened this file by writing a code instead of not manually.

```
In [12]: import pandas
```

```
In [16]: mydataset = {
    'cars': ["Kia", "Benz", "Toyota"],
    'orders': [9, 11, 10]
}
hell=pandas.DataFrame(mydataset)
print(hell)
```

|   | cars   | orders |
|---|--------|--------|
| 0 | Kia    | 9      |
| 1 | Benz   | 11     |
| 2 | Toyota | 10     |

```
In [24]: import pandas
dataset1={
    'Veg items':['Veg Friedrice','Veg Biryani','Panner'],
    'Prices':[100,120,150]
}
x=pandas.DataFrame(dataset1)
print(x)
dataset2={
    'Non-Veg items':['Egg Friedrice','Chicken biryani','Chicken 65'],
    'prices':[120,150,180]
}
y=pandas.DataFrame(dataset2)
print(y,end='/n')
```

|   | Veg items     | Prices |
|---|---------------|--------|
| 0 | Veg Friedrice | 100    |
| 1 | Veg Biryani   | 120    |
| 2 | Panner        | 150    |

  

|   | Non-Veg items   | prices |
|---|-----------------|--------|
| 0 | Egg Friedrice   | 120    |
| 1 | Chicken biryani | 150    |
| 2 | Chicken 65      | 180/n  |

```
In [30]: import pandas
a=pandas.read_csv('Desktop//Book1.csv')
print(a.to_string())
```

|   | Menu                 | Prices |
|---|----------------------|--------|
| 0 | Veg Manchuria        | 100    |
| 1 | Veg Biryani          | 120    |
| 2 | Panner Butter Masala | 250    |

```
In [1]: f=open('myfile1.txt','w')
f.write('Now I opened this file by writing a code instead of not manually.')
f.close()
f=open('myfile1.txt','r')
print(f.read())
```

Now I opened this file by writing a code instead of not manually.

```
In [22]: import pandas as dk
Family_members={
    'Name':['P.Sitaramu','P.Lalita','P.Ganesh','P.Yogesh'],
    'Age':[45,39,19,13],
    'Gender':['Male','Female','Male','Male'],
    'Contact':[9949608625,9676057467,8688123386,7075697277],
}
x=dk.DataFrame(Family_members)
print(x)
```

|   | Name       | Age | Gender | Contact    |
|---|------------|-----|--------|------------|
| 0 | P.Sitaramu | 45  | Male   | 9949608625 |
| 1 | P.Lalita   | 39  | Female | 9676057467 |
| 2 | P.Ganesh   | 19  | Male   | 8688123386 |
| 3 | P.Yogesh   | 13  | Male   | 7075697277 |

```
In [31]: import pandas as pd
a=[8.2,6.3,8.1,8.4,1.8,2.9,3.5,3.7,8.8,6.6]
my=pd.Series(a)
print(my)
```

```
0    8.2
1    6.3
2    8.1
3    8.4
4    1.8
5    2.9
6    3.5
7    3.7
8    8.8
9    6.6
dtype: float64
```

```
In [32]: import pandas as pd
a = [1, 7, 2]
myvar = pd.Series(a, index = ["x", "y", "z"])
print(myvar)
```

```
x    1
y    7
z    2
dtype: int64
```

```
In [35]: import pandas as pd
a=[8.2,6.3,8.1,8.4,1.8,2.9,3.5,3.7,8.8,6.6]
my=pd.Series(a)
print(my[3])
```

```
8.4
```



```
In [51]: import pandas as dk
Family_members={
    'Name':['P.Sitaramu','P.Lalita','P.Ganesh','P.Yogesh'],
    'Age':[45,39,19,13],
    'Gender':['Male','Female','Male','Male'],
    'Contact':[9949608625,9676057467,8688123386,7075697277],
}
x=dk.DataFrame(Family_members)
print(x)
print(x.loc[0])
print(x.loc[0:2])
print(x.loc[[0,2]])
```

|   | Name       | Age | Gender | Contact    |
|---|------------|-----|--------|------------|
| 0 | P.Sitaramu | 45  | Male   | 9949608625 |
| 1 | P.Lalita   | 39  | Female | 9676057467 |
| 2 | P.Ganesh   | 19  | Male   | 8688123386 |
| 3 | P.Yogesh   | 13  | Male   | 7075697277 |

Name P.Sitaramu  
Age 45  
Gender Male  
Contact 9949608625  
Name: 0, dtype: object

|   | Name       | Age | Gender | Contact    |
|---|------------|-----|--------|------------|
| 0 | P.Sitaramu | 45  | Male   | 9949608625 |
| 1 | P.Lalita   | 39  | Female | 9676057467 |
| 2 | P.Ganesh   | 19  | Male   | 8688123386 |

Name P.Sitaramu  
Age 45  
Gender Male  
Contact 9949608625  
Name: 0, dtype: object

|   | Name       | Age | Gender | Contact    |
|---|------------|-----|--------|------------|
| 0 | P.Sitaramu | 45  | Male   | 9949608625 |
| 2 | P.Ganesh   | 19  | Male   | 8688123386 |

```
In [52]: import pandas as pd
calories = {"day1": 420, "day2": 380, "day3": 390}
myvar = pd.Series(calories)
print(myvar)
```

```
day1    420
day2    380
day3    390
dtype: int64
```

```
In [53]: import pandas as pd
calories = {"day1": 420, "day2": 380, "day3": 390}
myvar = pd.Series(calories, index = ["day1", "day2"])
print(myvar)
```

```
day1    420
day2    380
dtype: int64
```

```
In [1]: import pandas as pd
data = {
    "Duration":{
        "0":60,
        "1":60,
        "2":60,
        "3":45,
        "4":45,
        "5":60
    },
    "Pulse":{
        "0":110,
        "1":117,
        "2":103,
        "3":109,
        "4":117,
        "5":102
    },
    "Maxpulse":{
        "0":130,
        "1":145,
        "2":135,
        "3":175,
        "4":148,
        "5":127
    },
    "Calories":{
        "0":409,
        "1":479,
        "2":340,
        "3":282,
        "4":406,
        "5":300
    }
}
df = pd.DataFrame(data)
print(df)
```

|   | Duration | Pulse | Maxpulse | Calories |
|---|----------|-------|----------|----------|
| 0 | 60       | 110   | 130      | 409      |
| 1 | 60       | 117   | 145      | 479      |
| 2 | 60       | 103   | 135      | 340      |
| 3 | 45       | 109   | 175      | 282      |
| 4 | 45       | 117   | 148      | 406      |
| 5 | 60       | 102   | 127      | 300      |

```
In [20]: import pandas as d
df = d.read_csv('D://Book2.csv')
print(df)
new_df = df.dropna()
print(new_df.to_string())
```

|   | Name    | Age  | Gender |
|---|---------|------|--------|
| 0 | Ganesh  | NaN  | Male   |
| 1 | Yogesh  | 13.0 | Male   |
| 2 | Modi    | 71.0 | Male   |
| 3 | Deepika | 36.0 | Female |

  

|   | Name    | Age  | Gender |
|---|---------|------|--------|
| 1 | Yogesh  | 13.0 | Male   |
| 2 | Modi    | 71.0 | Male   |
| 3 | Deepika | 36.0 | Female |

```
In [8]: import pandas as pd
df = pd.read_csv('D://Book2.csv')
print(df)
df.dropna(inplace = True)
print(df.to_string())
```

|   | Name           | Age  | Gender |
|---|----------------|------|--------|
| 0 | Pillala Ganesh | NaN  | Male   |
| 1 | Pillala Yogesh | 13.0 | Male   |
| 2 | Narendra Modi  | 71.0 | Male   |
| 3 | Deepika singh  | 36.0 | Female |

  

|   | Name           | Age  | Gender |
|---|----------------|------|--------|
| 1 | Pillala Yogesh | 13.0 | Male   |
| 2 | Narendra Modi  | 71.0 | Male   |
| 3 | Deepika singh  | 36.0 | Female |

```
In [19]: import pandas as pd
df = pd.read_csv('D://Book2.csv')
print(df)
df.fillna(19, inplace=True)
print(df)
```

|   | Name    | Age  | Gender |
|---|---------|------|--------|
| 0 | Ganesh  | NaN  | Male   |
| 1 | Yogesh  | 13.0 | Male   |
| 2 | Modi    | 71.0 | Male   |
| 3 | Deepika | 36.0 | Female |

  

|   | Name    | Age  | Gender |
|---|---------|------|--------|
| 0 | Ganesh  | 19.0 | Male   |
| 1 | Yogesh  | 13.0 | Male   |
| 2 | Modi    | 71.0 | Male   |
| 3 | Deepika | 36.0 | Female |

```
In [18]: import pandas as pd
df = pd.read_csv('D://Book2.csv')
print(df)
df["Age"].fillna(19, inplace = True)
print(df)
```

|   | Name    | Age  | Gender |
|---|---------|------|--------|
| 0 | Ganesh  | NaN  | Male   |
| 1 | Yogesh  | 13.0 | Male   |
| 2 | Modi    | 71.0 | Male   |
| 3 | Deepika | 36.0 | Female |

  

|   | Name    | Age  | Gender |
|---|---------|------|--------|
| 0 | Ganesh  | 19.0 | Male   |
| 1 | Yogesh  | 13.0 | Male   |
| 2 | Modi    | 71.0 | Male   |
| 3 | Deepika | 36.0 | Female |

```
In [21]: import pandas
df_new=pd.read_csv('D://Book2.csv')
G=pd.ExcelWriter('D://Book3.xlsx')
df_new.to_excel(G, index=False)
G.save
print(df)
```

|   | Name    | Age  | Gender |
|---|---------|------|--------|
| 0 | Ganesh  | NaN  | Male   |
| 1 | Yogesh  | 13.0 | Male   |
| 2 | Modi    | 71.0 | Male   |
| 3 | Deepika | 36.0 | Female |

```
In [ ]:
```