Task-1

```
import numpy as np

my_arr=np.arange(200,241,2)
my_arr
```

```
array([200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222,
224,
       226, 228, 230, 232, 234, 236, 238, 240])
```

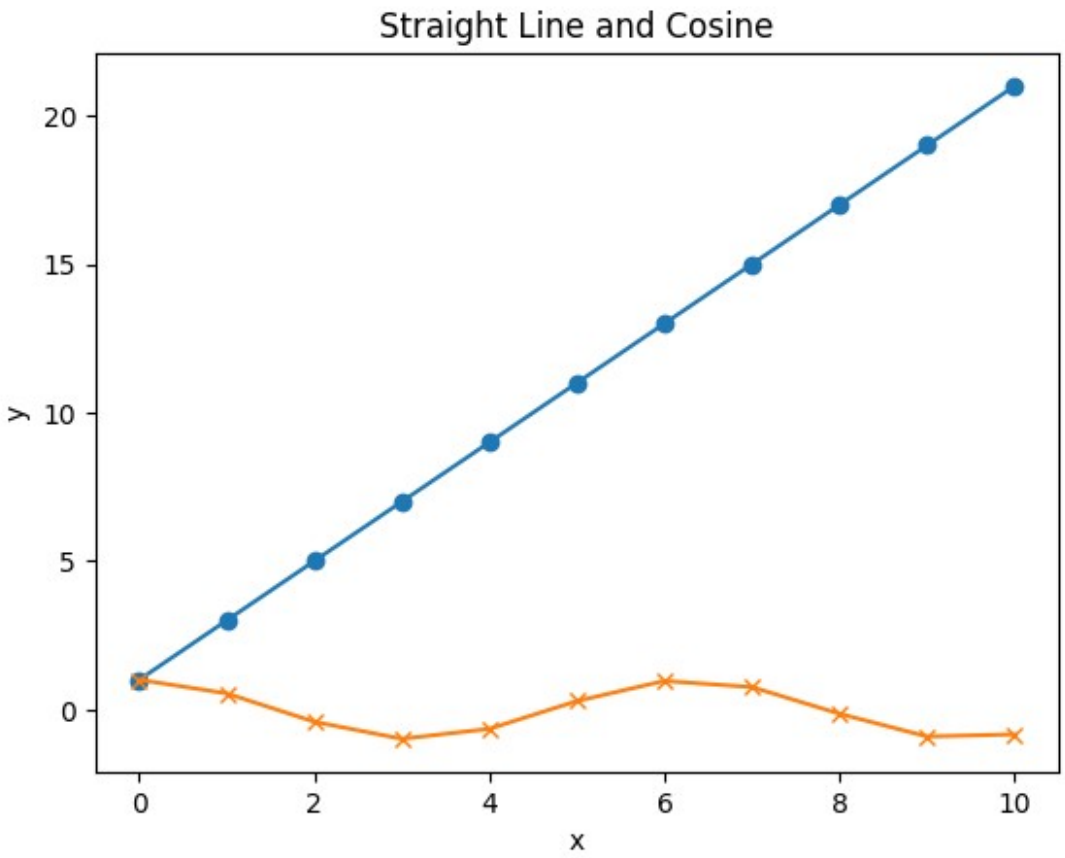
Task-2

```
#as in standard normal distribution mean is 0 and standard deviation
is 1.
#mu,sigma=0,1
#x=mu+sigma*np.random.randn(10)
#But in numpy randn does that already so we dont need to define mean
and standard deviation separately.
x=np.random.randn(10)
x
```

```
array([-0.68762477,  1.87063381,  0.17234251, -0.06819618, -
0.61187739,
       -0.71262496, -1.81295706,  0.89156862,  0.6681318 ,
1.7630022 ])
```

Task-3

```
import matplotlib.pyplot as plt
plt.title("Straight Line and Cosine")
x=np.arange(0,11)
t=np.cos(x)
y=2*x+1
plt.xlabel('x')
plt.ylabel('y')
plt.plot(x,y,marker='o')
plt.plot(x,t,marker='x')
#plt.grid()
plt.show()
```



Task-4

```
import pandas as pd
print('''Sample Series:
Original Data Series:''')
d_lst=[100,200,'python',300.12,400]
s=pd.Series(d_lst)
s
#s=pd.to_numeric(s,errors='coerce')
#s
```

```
Sample Series:
Original Data Series:

0       100
1       200
2    python
3    300.12
4       400
dtype: object
```

```
s=pd.to_numeric(s,errors='coerce')
s
```

```
0    100.00
1    200.00
2       NaN
3    300.12
4    400.00
dtype: float64
```

Task-5

```
import pandas as pd
print('''Sample data:
Original DataFrame:''')
lst_d=([1,4,7],[4,5,8],[3,6,9],[4,7,0],[5,8,1])
data=pd.DataFrame(lst_d,columns=['col1','col2','col3'])
data
```

```
Sample data:
Original DataFrame:
```

	col1	col2	col3
0	1	4	7
1	4	5	8
2	3	6	9
3	4	7	0
4	5	8	1

```
data.drop(1,inplace=True)
data
```

	col1	col2	col3
0	1	4	7
2	3	6	9
3	4	7	0
4	5	8	1