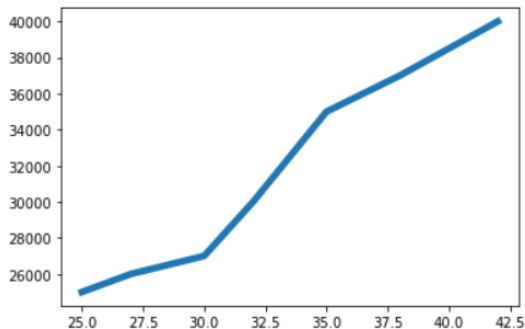**6a) Write a Python program to illustrate Linear Plotting using Matplotlib.**

6b) Write a Python program to illustrate liner plotting with line formatting using Matplotlib.

```
import matplotlib.pyplot as plt
age=[25, 27, 30, 32, 35, 38, 42]
salary= [25000, 26000, 27000, 30000, 35000, 37000, 40000]
plt.plot(age, salary, linewidth=5, alpha=1)
plt.show()
```



```
import matplotlib.pyplot as plt
import numpy as np
x = np.array([1, 2, 3, 4, 5, 6])
y = x*2
z=x*3
plt.plot(x, y)
plt.plot(x, z, '-.')
plt.fill_between(x, y, z, color='m', alpha=0.9)
plt.show()
```
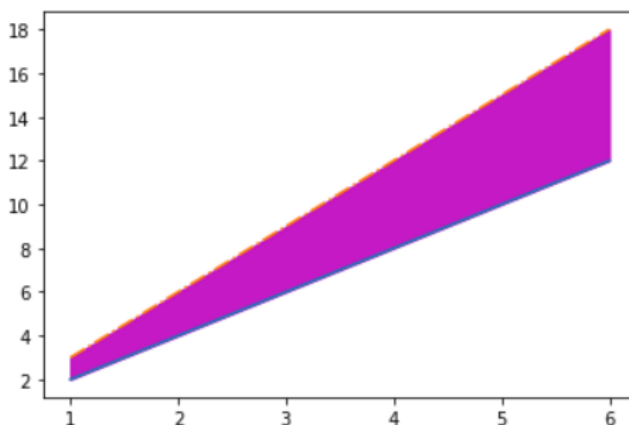
```python
import matplotlib.pyplot as plt
import random as random
students = ["A","B","C","D",
        "E","F","G","H",
        "I","J","K"]
marks=[]
for i in range(0,len(students)):
    marks.append(random.randint(0, 101))
plt.xlabel("Students")
plt.ylabel("Marks")
plt.title("CLASS RECORDS")
plt.plot(students,marks,'m--')
plt.grid(True, which='both', linestyle='--', linewidth=1)
plt.show()
```
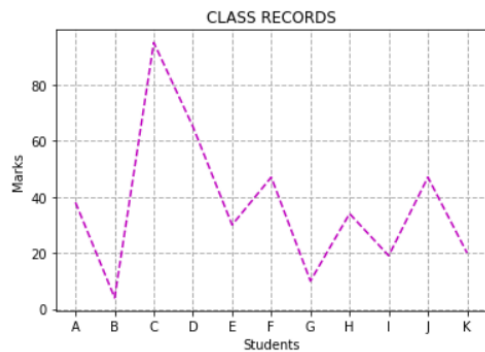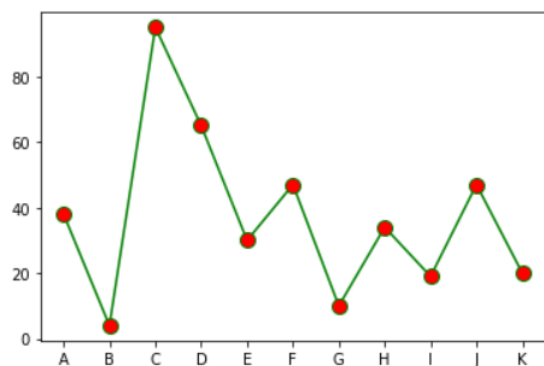


```python
plt.plot(students, marks, color = 'green',
     linestyle = 'solid', marker = 'o',
     markerfacecolor = 'red', markersize = 10)
plt.show()
```

DEPT OF CSE

```python
import matplotlib.pyplot as plt

places = ["A", "B", "C", "D", "E", "F", "G", "H", "I", "J"]
literacy_rate = [100, 98, 90, 85, 75, 50, 30, 45, 65, 70]
female_literacy = [95, 100, 50, 60, 85, 80, 75, 99, 70, 30]

plt.xlabel("Places")
plt.ylabel("Percentage")

plt.plot(places, literacy_rate, color='green',
     linewidth=6, marker='o',markerfacecolor='red',
     label="Literacy rate")

plt.plot(places, female_literacy, color='yellow',
     linewidth=4,marker='o',markerfacecolor='black',
     label="Female Literacy rate")

plt.legend(loc='upper right')
plt.show()
```

DEPT OF CSE