

Program:

#Changing point color, size, title, x-axis and y-axis labels

```
import matplotlib.pyplot as plt
```

```
import numpy as np
```

```
x = np.linspace(-3,3,301)
```

```
y = x*np.sin(x**2)+np.exp(-x**2/2)
```

```
plt.plot(x,y)
```

```
plt.show()
```

```
plt.plot(x,y,'r',linewidth=2)
```

```
plt.show()
```

```
plt.plot(x,y,'r--',linewidth=2)
```

```
plt.show()
```

```
plt.plot(x,y,'r:',linewidth=2)
```

```
plt.show()
```

```
plt.plot(x,y,'r-.',linewidth=2)
```

```
plt.show()
```

```
plt.plot(x,y)
```

```
plt.xlabel('$x$-axis')
```

```
plt.ylabel('$y$-axis')
```

```
plt.title('Graph of  $f(x)=x\sin(x^2)+e^{-x^2/2}$ ')
```

```
plt.grid(color='red', linestyle='-.', linewidth=0.7)
```

```
plt.show()
```

Output:

