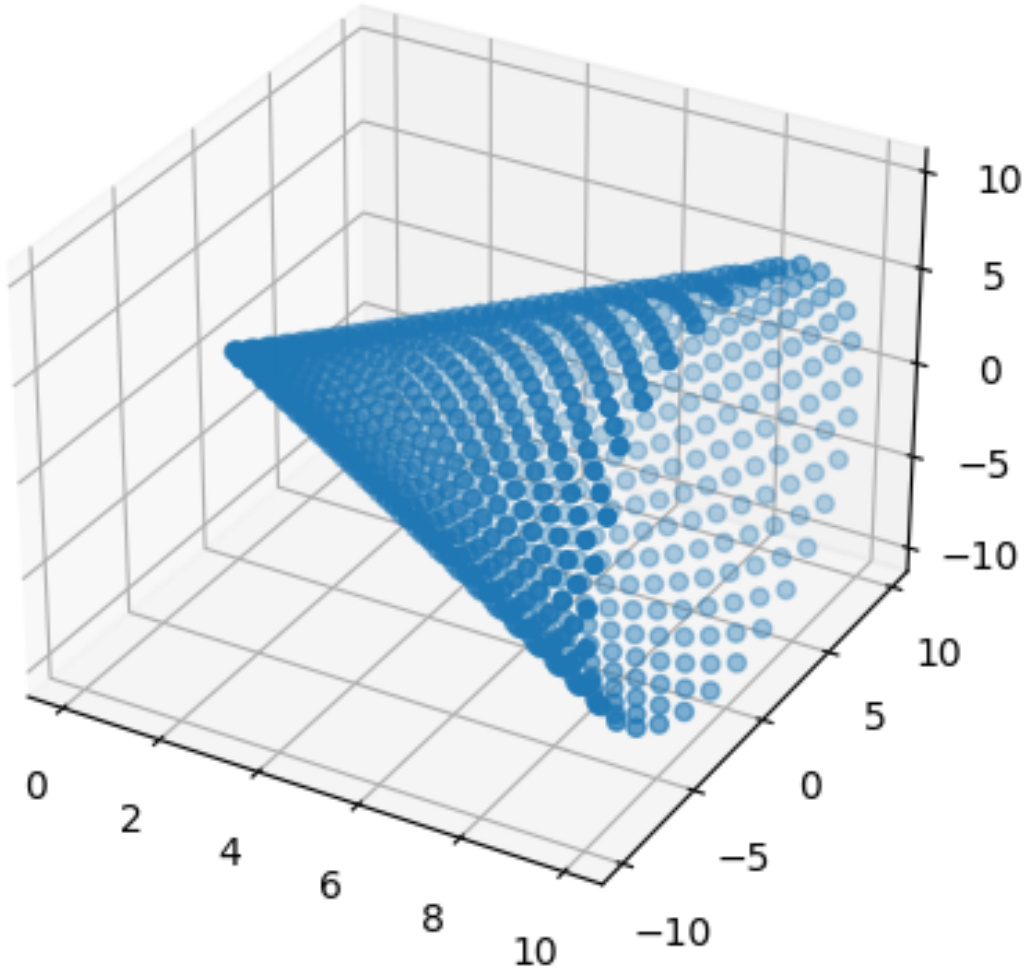
3D scatter plot can be generated by using scatter3D() function

```
from mpl_toolkits import mplot3d
import matplotlib.pyplot as plt
import numpy as np

ax = plt.axes(projection='3d')
x = np.linspace(0, 10, 1000)
y = x * np.sin(20 * x)
z = x * np.cos(20 * x)
ax.scatter3D(x, y, z)
plt.show()
```



```
#lets make it more clear and understandable
from mpl_toolkits import mplot3d
import matplotlib.pyplot as plt
import numpy as np

x = np.linspace(0, 10, 1000)
y = x * np.sin(20 * x)
z = x * np.cos(20 * x)
fig = plt.figure()
ax = plt.axes(projection='3d')
#c parameter is used for marker color
#here we give variable value of c we can also give static color
value like green, red, blue etc.
ScatterPlot = ax.scatter3D(x, y, z, c=x*y, marker='^')
plt.title('3D scatter plot')
ax.set_xlabel('X-axis', fontweight='bold')
ax.set_ylabel('Y-axis', fontweight='bold')
ax.set_zlabel('Z-axis', fontweight='bold')
#value of shrink parameter lies between 0 to 1 (default 1)
fig.colorbar(ScatterPlot, shrink=0.7)
plt.show()
```