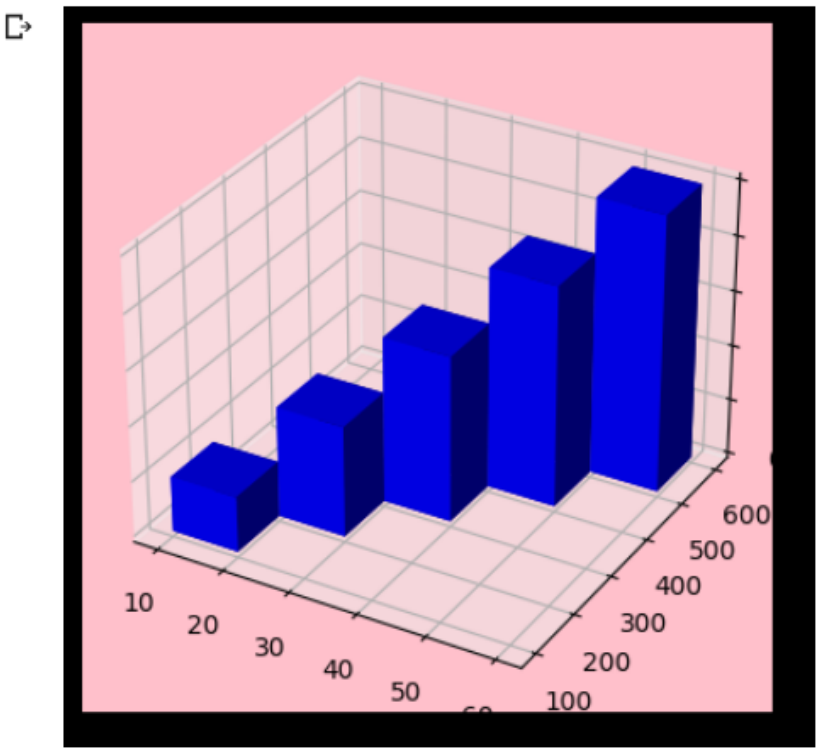
Name : Om patil Roll No : 6265 Class : SYIT Div : C

PRACTICAL 8

- Create a 3Dbar for a smaple data

```
import matplotlib.pyplot as plt
fig=plt.figure (facecolor='k')
axl=fig.add_subplot (111,projection='3d')
xpos=[10,20,30,40,50]
ypos=[100,200,300,400,500]
zpos=[0,0,0,0,0]
dx=[10,10,10,10,10]
dy=[100,100,100,100,100]
dz=[1,2,3,4,5]
axl.bar3d(xpos,ypos,zpos,dx,dy,dz,color="blue")
axl.set_facecolor("pink")
plt.show()
```

Output :



Name : Om patil Roll No : 6265 Class : SYIT Div : C

PRACTICAL 9

- Demonstrate some matpotlib animations

```
import matplotlib.pyplot as plt
import pandas as pd
from matplotlib.animation import FuncAnimation
data = pd.read_csv("C:/Users/Student/Desktop/file1.csv")
xdata,ydata=[],[]
fig,ax=plt.subplots()
ln, = plt.plot([],[],'r')
ax.set_xlim(data['x'].min(),data['x'].max())
ax.set_ylim(data['y'].min(),data['y'].max())
def init():
    ln.set_data([],[])
    return ln,
def update(frame):
    xdata.append(data['x'][frame])
    ydata.append(data['y'][frame])
    ax.fill_between(xdata,y1=0,y2=ydata,color='b',alpha=0.3)
    ln.set_data(xdata,ydata)
    return ln,
ani = FuncAnimation(fig,update,frames=range(len(data)),init_func=init,
                    interval=100,blit=True)
ani.save("C:/Animation/Ani1.gif",writer="pillow")
plt.show()
```

Output :

Name : Om patil Roll No : 6265 Class : SYIT Div : C