

Shriharsha A Vaidhyam

Quiz 13

Source code:

```
def binPack(weight, length, capacity):  
  
    res = 0  
  
    x = [0]*length  
  
    for i in range(length):  
  
        j = 0  
        while( j < res):  
            if (x[j] >= weight[i]):  
                x[j] = x[j] - weight[i]  
                break  
            j+=1  
  
        if (j == res):  
            x[res] = capacity - weight[i]  
            res= res+1  
    return res  
  
weight = [0.1, 0.26, 0.35, 0.4, 0.5, 0.6, 0.75, 0.99]  
capacity = 1  
length = len(weight)  
print("Number of bins required : ",binPack(weight, length, capacity))
```

Output:

```
harshavaidhyam@Harshas-MacBook-Pro quiz 13 % cd /Users/harshavaidhyam/Desktop/Pitt\  
term-1/Algo\ Design/quiz\ 13 ; /usr/bin/env /usr/local/bin/python3 /Users/harshavai  
dhyam/.vscode/extensions/ms-python.python-  
2022.16.1/pythonFiles/lib/python/debugpy/adapters/../../debugpy/launcher 55580 --  
/Users/harshavaidhyam/Desktop/Pitt\ term-1/Al  
go\ Design/quiz\ 13/q13.py
```

Number of bins required : 5