# Python3 implementation of First-Fit algorithm

# Function to allocate memory to

# blocks as per First fit algorithm

def firstFit(blockSize, m, processSize, n):

# Stores block id of the

# block allocated to a process

allocation = [-1] \* n

# Initially no block is assigned to any process

# pick each process and find suitable blocks

# according to its size ad assign to it

for i in range(n):

for j in range(m):

if blockSize[j] >= processSize[i]:

# allocate block j to p[i] process

allocation[i] = j

# Reduce available memory in this block.

blockSize[j] -= processSize[i]

break

print(" Process No. Process Size Block no.")

for i in range(n):

print(" ", i + 1, " ", processSize[i],

" ", end = " ")

if allocation[i] != -1:

print(allocation[i] + 1)

else:

print("Not Allocated")

# Driver code

if \_\_name\_\_ == '\_\_main\_\_':

blockSize = [100, 500, 200, 300, 600]

processSize = [212, 417, 112, 426]

m = len(blockSize)

n = len(processSize)

firstFit(blockSize, m, processSize, n)