OPERATING SYSTEM - CS23431
EXP 10(a)
BEST FIT

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PROGRAM(PYTHON):

```python
n1=int(input("Enter memory block size: "))
memory_block=[0]*n1
print("Enter value for memoryblocks")
for i in range(n1):
    memory_block[i]=int(input())
n2=int(input("Enter process block size: "))
process_block=[0]*n2
print("Enter value for processblocks")
for i in range(n2):
    process_block[i]=int(input())
alloc=[0]*n2
for i in range(n1):
    bestfit_ind=-1
    minrem_memory=float('inf')
    for j in range(n2):
        if memory_block[j]>=process_block[i]:
            rem_memory=memory_block[j]-process_block[i]
            if rem_memory<minrem_memory:
                minrem_memory=rem_memory
                bestfit_ind=j

    if bestfit_ind!=-1:
        alloc[i]=bestfit_ind
        memory_block[bestfit_ind]-=process_block[i]
print(alloc)
```

OUTPUT:

```
Exiting...[student@localhost ~]$ vi bestfit.py
[student@localhost ~]$ python3 bestfit.py
Enter memory block size: 5
Enter value for memoryblocks
100
500
200
300
400
Enter process block size: 5
Enter value for processblocks
350
150
250
600
100
[4, 2, 3, 0, 0]
[student@localhost ~]$
```