package pakage;

import java.util.\*;

public class NextFit {

static void Next\_Fit(int block\_size[], int m, int process\_size[], int n)

{

// The code will store the block id for a block which is assigned to a process

int allocate[] = new int[n], j = 0;

// No block is assigned to any process at the beginning

Arrays.fill(allocate, -1);

// Find a suitable block for each process as per its size and assign memory to it

for(int i = 0; i < n; i++) {

// Not starting from the beginning

while (j < m) {

if (block\_size[j] >= process\_size[i]) {

// block j is allocated to p[i] process

allocate[i] = j;

// Reduce available memory in this block.

block\_size[j] -= process\_size[i];

break;

}

// mod m will traverse the blocks from the starting when the pointer reaches at the end.

j = (j + 1) % m;

}

}

System.out.print("\nProcess No.\tProcess Size\tBlock no.\n");

for (int i = 0; i < n; i++) {

System.out.print( i + 1 + "\t\t" + process\_size[i]

+ "\t\t");

if (allocate[i] != -1) {

System.out.print(allocate[i] + 1);

} else {

System.out.print("Not Allocated");

}

System.out.println("");

}

}

// Driver program

static public void main(String[] args) {

int block\_size[] = {5, 10, 20};

int process\_size[] = {10, 20, 5};

int m = block\_size.length;

int n = process\_size.length;

Next\_Fit(block\_size, m, process\_size, n);

}

}