10. . Construct a C program for implementation of memory allocation using first fit strategy.

PROGRAM

#include<stdio.h>

void firstFit(int blockSize[], int m, int processSize[], int n)

{

int i, j;

int allocation[n];

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

{

allocation[i] = -1;

}

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

{

for (j = 0; j < m; j++)

{

if (blockSize[j] >= processSize[i])

{

allocation[i] = j;

blockSize[j] -= processSize[i];

break;

}

}

}

printf("\nProcess No.\tProcess Size \tBlock no.\n");

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

{

printf(" %i\t\t\t", i+1);

printf("%i\t\t\t\t", processSize[i]);

if (allocation[i] != -1)

printf("%i", allocation[i] + 1);

else

printf("Not Allocated");

printf("\n");

}

}

int main()

{

int m;

int n;

int blockSize[] = {100, 500, 200, 300, 600};

int processSize[] = {212, 417, 112, 426};

m = sizeof(blockSize) / sizeof(blockSize[0]);

n = sizeof(processSize) / sizeof(processSize[0]);

firstFit(blockSize, m, processSize, n);

return 0 ;

}

Input And Output

