**P2 – Operating Systems Lab**

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**Implement First-First Algorithm for the following scenario, but searching for next process must start at the location where previous first-fit search ends. Also display the total unused memory space value after allocating all the processes.**

**//Code:**

#include<iostream>

using namespace std;

int main()

{

int h,p;

cout<<"Enter the number of holes:";

cin>>h;

int hole\_size[h];

cout<<"Enter the hole size of each hole:";

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

cin>>hole\_size[i];

cout<<"Enter the number of processes:";

cin>>p;

int process\_size[p];

cout<<"Enter the process size of each hole:";

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

cin>>process\_size[i];

int cur\_p=0;

int seq[p];

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

seq[i]=-1;

int unused=0;

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

{

for(int j=0;j<h;j++)

{

if(hole\_size[j]>=process\_size[cur\_p] && seq[cur\_p]==-1)

{

hole\_size[j]=hole\_size[j]-process\_size[cur\_p];

seq[cur\_p]=j;

cur\_p++;

}

}

cur\_p++;

}

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

if(hole\_size>0)

unused=unused+hole\_size[i];

cout<<"Process number\tProcess Size\tHole Allocated"<<endl;

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

cout<<i<<"\t\t"<<process\_size[i]<<"\t\t"<<seq[i]<<endl;

cout<<endl;

cout<<"Total Unused Space is "<<unused;

return 0;

}

**//Output:**

