Name - Akansha Sundriyal
Course - BSC - IT
Student ID - 20052081
University roll no. - 2023020

Ques 1 Problem Statement Write a c program to implement first fit algorithm.

Code

```
#include <stdio.h>
int main ()
{
int bsize [10], psize [10], bno, pno,
flags [10], allocation [10], i, j;
for (i= 0; i< 10; i++)
{
flags [i] = 0;
allocation [i] = -1;
}
printf ("Enter no. of blocks: ");
scanf ("%d", &bno);
printf ("\n Enter size of each block: ");
for (i=0; i< bno; i++)
scanf ("%d", &bsize [i]);
printf ("\n Enter no. of processes: ");
scanf ("%d", &pno);
printf ("\n Enter size of each process: ");
for (i=0; i< pno; i++)
scanf ("%d", &psize [i]);
for (i=0; i< pno; i++)          // allocation as per first fit
for (j=0; j< bno; j++)
if (flags [j] ==0 && bsize [j] >= psize [i])
{
```

Akansha Sundriyal

```
allocation[j] = i;
flags[j] = 1;
break;
}
}
// display allocation details
printf("\n Block no. \t size \t\t process no. \t\t size");
for (i = 0; i < bno; i++)
{
printf("\n %d \t\t %d \t\t", i+1, bsize[i]);
if (flag[i] == 1)
printf("%d \t\t\t %d", allocation[i]+1, psize
[allocation[i]]);
else
printf("Not allocated");
}
}
```

Akansha Sundriyal

```
Enter no. of blocks: 5

Enter size of each block: 2
1
2
3
4

Enter no. of processes: 3

Enter size of each process: 2
1
2

Block no.       size            process no.             size
1               2               1                       2
2               1               2                       1
3               2               3                       2
4               3               Not allocated
5               4               Not allocated
--------------------------------
Process exited after 19.45 seconds with return value 0
Press any key to continue . . .
```