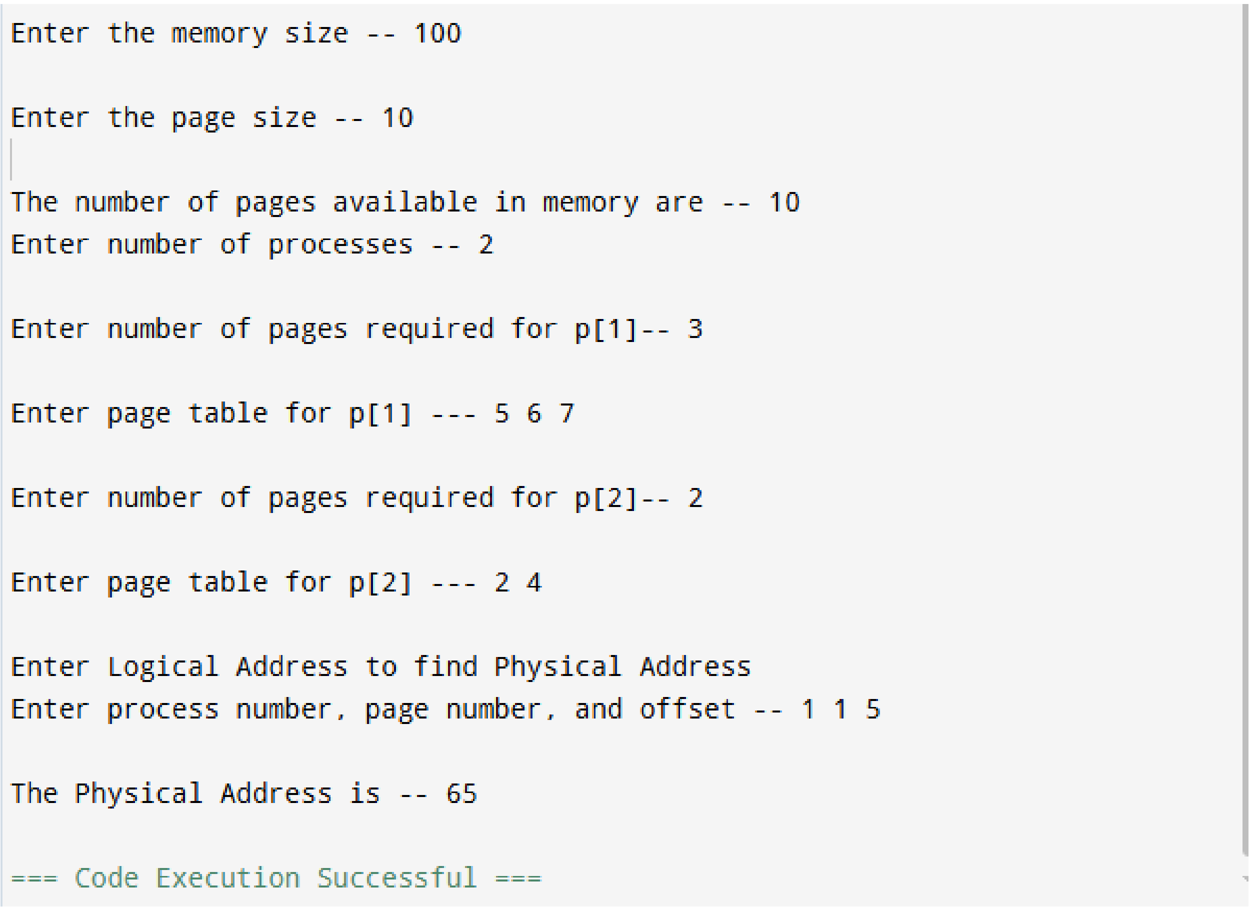
TASKEEN SADIQ
DT-22004

OS LAB 10

```
#include <stdio.h>
int main() {
 int ms, ps, nop, np, rempages, i, j, x, y, pa, offset;
 int s[10], fno[10][20];
 printf("\nEnter the memory size -- ");
 scanf("%d", &ms);
 printf("\nEnter the page size -- ");
 scanf("%d", &ps);
 nop = ms / ps;
 printf("\nThe number of pages available in memory are -- %d", nop);
printf("\nEnter number of processes -- ");
 scanf("%d", &np);
 rempages = nop;
 for(i = 1; i <= np; i++) {
 printf("\nEnter number of pages required for p[%d]-- ", i);
scanf("%d", &s[i]);
 if(s[i] > rempages) {
 printf("\nMemory is Full");
 break;
 }
 rempages = rempages - s[i];
 printf("\nEnter page table for p[%d] --- ", i);

 for(j = 0; j < s[i]; j++) {
 scanf("%d", &fno[i][j]);
 }
 }
 printf("\nEnter Logical Address to find Physical Address ");
printf("\nEnter process number, page number, and offset -- ");
scanf("%d %d %d", &x, &y, &offset);
 if(x > np || y >= s[x] || offset >= ps) {
 printf("\nInvalid Process or Page Number or Offset");  }
else {
 pa = fno[x][y] * ps + offset;
 printf("\nThe Physical Address is -- %d", pa);  }
 return 0;
}
```



```
Enter the memory size -- 100

Enter the page size -- 10

The number of pages available in memory are -- 10
Enter number of processes -- 2

Enter number of pages required for p[1]-- 3

Enter page table for p[1] --- 5 6 7

Enter number of pages required for p[2]-- 2

Enter page table for p[2] --- 2 4

Enter Logical Address to find Physical Address
Enter process number, page number, and offset -- 1 1 5

The Physical Address is -- 65

=== Code Execution Successful ===
```