Operating Systems (CT-353) Lab 10

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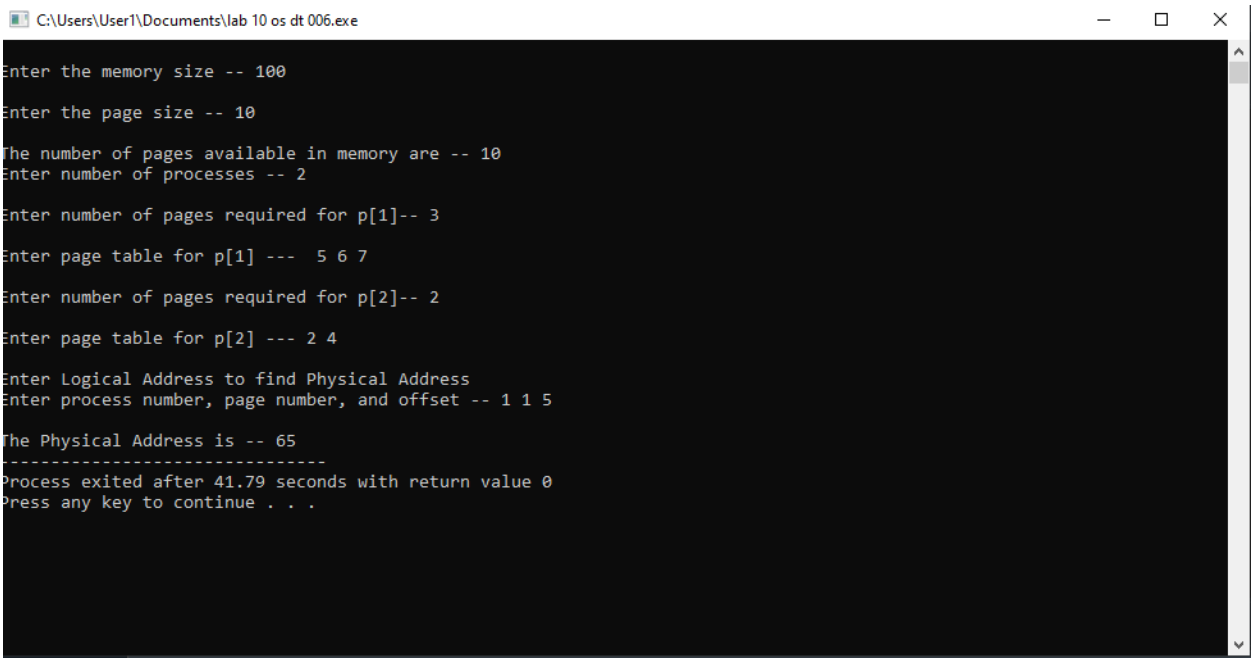
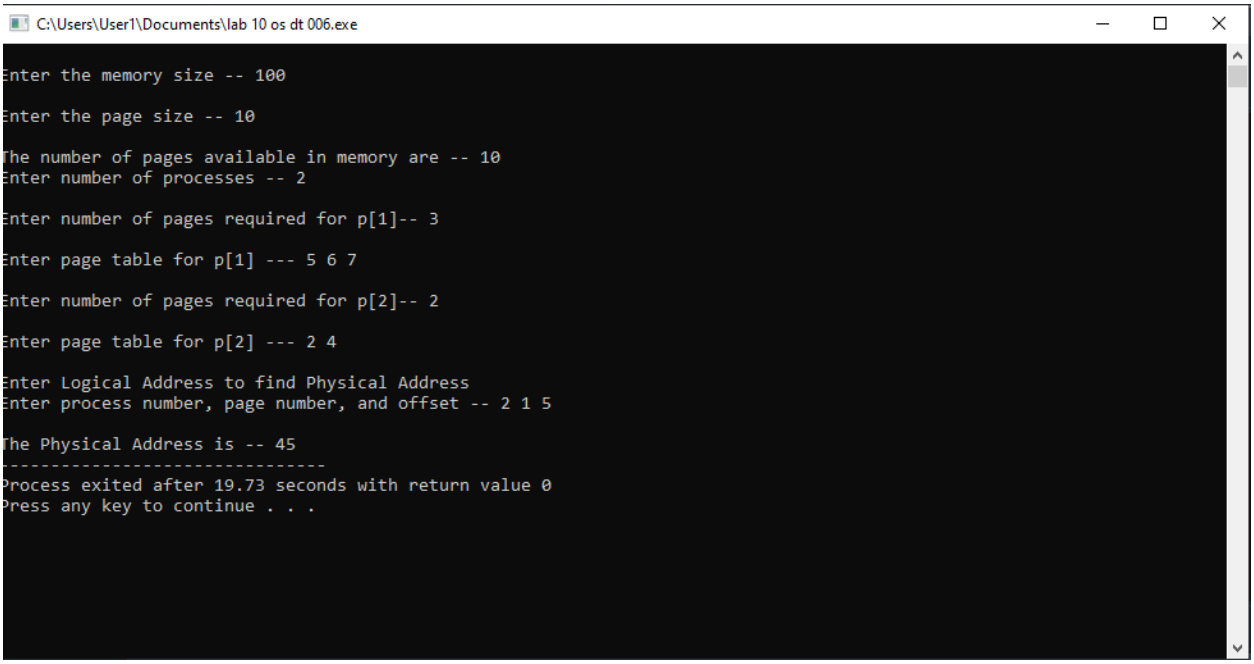
CODE:

```
#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;
}
```

OUTPUT:


C:\Users\User1\Documents\lab 10 os dt 006.exe
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
Process exited after 41.79 seconds with return value 0
Press any key to continue . . .


C:\Users\User1\Documents\lab 10 os dt 006.exe
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 -- 2 1 5
The Physical Address is -- 45
Process exited after 19.73 seconds with return value 0
Press any key to continue . . .