

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("Enter the page size: ");
    scanf("%d", &ps);

    nop = ms / ps;
    printf("The number of pages available in memory are: %d\n", nop);

    printf("Enter 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("Memory is Full\n");
            break;
        }

        rempages = rempages - s[i];

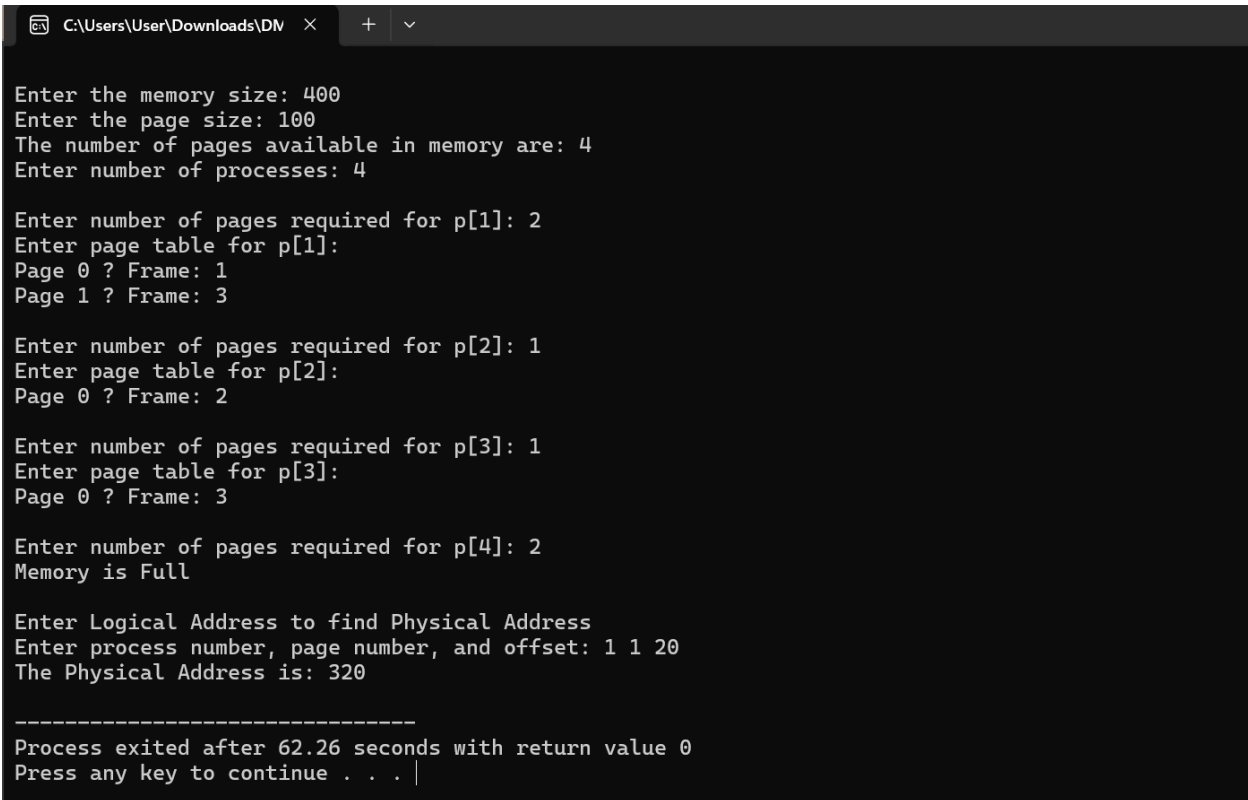
        printf("Enter page table for p[%d]:\n", i);
        for (j = 0; j < s[i]; j++) {
            printf("Page %d ? Frame: ", j);
            scanf("%d", &fno[i][j]);
        }
    }

    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("Invalid Process or Page Number or Offset\n");
    } else {
```

```
    pa = fno[x][y] * ps + offset;
    printf("The Physical Address is: %d\n", pa);
}

return 0;
}
```



```
C:\Users\User\Downloads\DV >
Enter the memory size: 400
Enter the page size: 100
The number of pages available in memory are: 4
Enter number of processes: 4

Enter number of pages required for p[1]: 2
Enter page table for p[1]:
Page 0 ? Frame: 1
Page 1 ? Frame: 3

Enter number of pages required for p[2]: 1
Enter page table for p[2]:
Page 0 ? Frame: 2

Enter number of pages required for p[3]: 1
Enter page table for p[3]:
Page 0 ? Frame: 3

Enter number of pages required for p[4]: 2
Memory is Full

Enter Logical Address to find Physical Address
Enter process number, page number, and offset: 1 1 20
The Physical Address is: 320

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Process exited after 62.26 seconds with return value 0
Press any key to continue . . . |
```