

## LAB 10

Implement the above code and paste the screen shot of the output.

CODE:

```
#include <stdio.h>
```

```
#include <conio.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: %d", nop);
```

```
    printf("\nEnter the 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 -= s[i];

    printf("Enter page table for p[%d]:\n", 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("The Physical Address is: %d", pa);
}

getch();
return 0;
}

```

OUTPUT:

```
C:\Users\admin\OneDrive\Desktop\LAB10.exe

Enter the memory size: 4
Enter the page size: 3
The number of pages available in memory: 1
Enter the number of processes: 2

Enter number of pages required for p[1]: 1
Enter page table for p[1]:
2

Enter number of pages required for p[2]: 3

Memory is Full
Enter Logical Address to find Physical Address
Enter process number, page number, and offset: 2
1
3

Invalid Process or Page Number or Offset
```