

Ex. No. 12

Paging Technique

Date:

Aim

To determine physical address of a given page using page table.

Algorithm

1. Get process size
2. Compute no. of pages available and display it
3. Get relative address
4. Determine the corresponding page
5. Display page table
6. Display the physical address

Program

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

main()
{
    int size, m, n, pgno, pagetable[3]={5,6,7}, i, j, frameno;
    double m1;
    int ra=0, ofs;

    printf("Enter process size (in KB of max 12KB):");
    scanf("%d", &size);
    m1 = size / 4;
    n = ceil(m1);
    printf("Total No. of pages: %d", n);
    printf("\nEnter relative address (in hexa) \n");
    scanf("%d", &ra);

    pgno = ra / 1000;
    ofs = ra % 1000;
    printf("page no=%d\n", pgno);
    printf("page table");
    for(i=0;i<n;i++)
        printf("\n %d [%d]", i, pagetable[i]);
    frameno = pagetable[pgno];
    printf("\nPhysical address: %d%d", frameno, ofs);
}
```

Output

```
Enter process size (in KB of max 12KB):12
Total No. of pages: 3
Enter relative address (in hexa):
2643
page no=2
page table
0 [5]
1 [6]
2 [7]
Physical address : 7643
```

Result

Thus physical address for the given logical address is determining using Paging technique.