

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

```
int main()
```

```
{
```

```
    int n, frame;
```

```
    printf("Enter the no. of process : ");
```

```
    scanf("%d", &n);
```

```
    int s[n];
```

```
    printf("Enter the processes: ");
```

```
    for(int i = 0; i < n; i++)
```

```
    {
```

```
        scanf("%d", &s[i]);
```

```
    }
```

```
    printf("Enter the frame : ");
```

```
    scanf("%d", &frame);
```

```
    int ram[frame];
```

```
    for(int i = 0; i < frame; i++)
```

```
    {
```

```
        ram[i] = -1;
```

```
    }
```

```
    int fault = 0;
```

```
    int hit = 0;
```

```
    int isfull = 0; // keeps track of how many pages are filled
```

```
    int MRU = 0; // keeps track of the index of the MRU page
```

```
    for(int i = 0; i < n; i++)
```

```
    {
```

```
        int temp = 0;
```

```

for(int j = 0; j < isfull; j++) // check all the pages that are filled
{
    if(ram[j] == s[i]) // page hit
    {
        hit++;
        MRU = j;
        temp = 1;
        break;
    }
}

if(isfull < frame) // all pages are not filled
{
    if(temp == 0) // page fault
    {
        fault++;
        MRU = isfull;
        ram[isfull] = s[i];
        isfull++;
    }
}

else // all pages are full
{
    if(temp == 0) // page fault
    {
        ram[MRU] = s[i];
        fault++;
    }
}
}

printf("\nTotal Page faults : %d", fault);

```

```
printf("\nTotal Page hits : %d", hit);
```

```
return 0;
```

```
}
```