

```

#include<stdio.h>

int main()
{
    int no_of_frames, no_of_pages, frames[10], pages[30], temp[10], flag1, flag2, flag3, i, j, k, pos, max, faults =
    0;

    printf("Enter number of frames: ");
    scanf("%d", &no_of_frames);

    printf("Enter number of pages: ");
    scanf("%d", &no_of_pages);

    printf("Enter page reference string: ");

    for(i = 0; i < no_of_pages; ++i){
        scanf("%d", &pages[i]);
    }

    for(i = 0; i < no_of_frames; ++i){
        frames[i] = -1;
    }

    flag1 = flag2 = 0;

    for(j = 0; j < no_of_frames; ++j){
        if(frames[j] == pages[i]){
            flag1 = flag2 = 1;
            break;
        }
    }

    if(flag1 == 0){
        for(j = 0; j < no_of_frames; ++j){
            if(frames[j] == -1){
                faults++;
            }
        }
    }
}

```

```
frames[j] = pages[i];
```

```
flag2 = 1;
```

```
break;
```

```
}
```

```
}
```

```
}
```

```
if(flag2 == 0){
```

```
flag3 = 0;
```

```
for(j = 0; j < no_of_frames; ++j){
```

```
temp[j] = -1;
```

```
for(k = i + 1; k < no_of_pages; ++k){
```

```
if(frames[j] == pages[k]){
```

```
temp[j] = k;
```

```
break;
```

```
}
```

```
}
```

```
}
```

```
for(j = 0; j < no_of_frames; ++j){
```

```
if(temp[j] == -1){
```

```
pos = j;
```

```
flag3 = 1;
```

```
break;
```

```
}
```

```
}
```

```
if(flag3 == 0){
```

```
max = temp[0];
```

```
pos = 0;
```

```
for(j = 1; j < no_of_frames; ++j){
```

```
if(temp[j] > max){
```

```
max = temp[j];
pos = j;
}
}
}
frames[pos] = pages[i];
faults++;
}

printf("\n");

for(j = 0; j < no_of_frames; ++j){
printf("%d\t", frames[j]);
}
}

printf("\n\nTotal Page Faults = %d", faults);

return 0;
}
```