9.

#include<stdio.h>

void 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;

}

for(i = 0; i < no\_of\_pages; ++i){ 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);

}

OUTPUT:

