Practical-7

1. Write C Program to implement FCFS Process scheduling algorithm.

CODE:

```
#include<stdio.h> void findWaitingTime(int processes[], int
n, int bt[], int wt[])
{ wt[0] = 0; for (int i = 1;
i < n ; i++ ) wt[i] = bt[i-
1] + wt[i-1] ;
}
// Function to calculate turn around time void
findTurnAroundTime( int processes[], int n, int
bt[], int wt[], int tat[])
{
// bt[i] + wt[i] for (int i
= 0; i < n ; i++) tat[i] =
bt[i] + wt[i];
}
//Function to calculate average time void
findavgTime( int processes[], int n, int bt[])
{ int wt[n], tat[n], total_wt = 0, total_tat =
0; findWaitingTime(processes, n, bt,
wt);
//Function to find turn around time for all processes
findTurnAroundTime(processes, n, bt, wt, tat); printf("Processes
Burst time Waiting time Turn around time\n");
// Calculate total waiting time and total turn around time for
(int i=0; i<n; i++) { total_wt = total_wt + wt[i]; total_tat =
total_tat + tat[i]; printf(" %d ",(i+1)); printf(" %d ", bt[i] );
printf(" %d",wt[i] );
printf(" %d\n",tat[i] );
} int s=(float)total_wt / (float)n; int
t=(float)total_tat / (float)n;
printf("Average waiting time =
%d",s);
printf("\n"); printf("Average turn around
time = %d ",t); } int main() {
int processes[] = { 1, 2, 3}; int
n = sizeof processes / sizeof
processes[0]; int burst_time[] = {10, 5, 8};
findavgTime(processes, n, burst_time);
return 0; }
```

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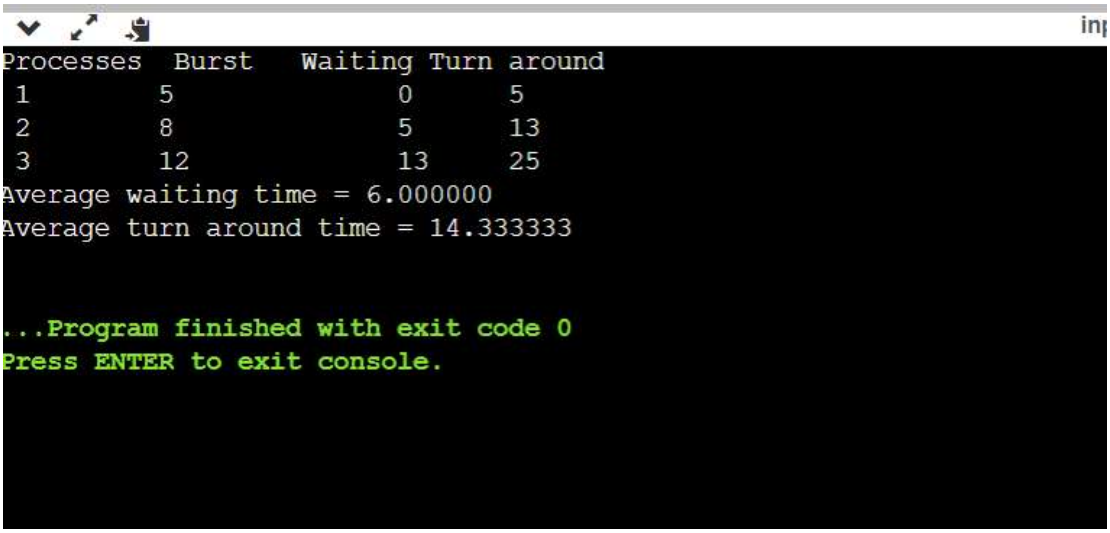
OUTPUT:



2.Write C Program to implement FIFO Page replacement algorithm.

CODE:

```
#include <stdio.h> int
main() {
int referenceString[10], pageFaults = 0, m, n, s, pages, frames;
printf("\nEnter the number of Pages:\t"); scanf("%d",
&pages); printf("\nEnter reference string
values:\n"); for( m = 0; m < pages; m++)
{ printf("Value No. [%d]:\t", m +
1); scanf("%d",
&referenceString[m]);
} printf("\n What are the total number of
frames:\t");
{
```

```
scanf("%d", &frames);
} int temp[frames]; for(m =
0; m < frames; m++)
{ temp[m] = 1; } for(m = 0;
m < pages; m++)
{ s = 0; for(n = 0; n <
frames; n++)
{ if(referenceString[m] ==
temp[n])
{ s++; pageFaults--; } } pageFaults++;
if((pageFaults <= frames) && (s == 0))
{ temp[m] =
referenceString[m];
} else if(s == 0) { temp[(pageFaults - 1) % frames] =
referenceString[m];
} printf("\n");
for(n = 0; n < frames; n++)
{
printf("%d\t", temp[n]);
}
} printf("\nTotal Page Faults:\t%d\n",
pageFaults);
return 0; }
```

OUTPUT
: