**SJF CPU SCHEDULING ALGORITHM:**

#include<stdio.h>

#include<unistd.h>

int main()

{

int p[20], bt[20], wt[20], tat[20], i, k, n, temp;

float wtavg, tatavg;

printf("\nEnter the number of processes -- ");

scanf("%d", &n);

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

{

p[i]=i;

printf("Enter Burst Time for Process %d -- ", i);

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

}

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

for(k=i+1;k<n;k++)

if(bt[i]>bt[k])

{

temp=bt[i];

bt[i]=bt[k];

bt[k]=temp;

temp=p[i];

p[i]=p[k];

p[k]=temp;

}

wt[0] = wtavg = 0;

tat[0] = tatavg = bt[0];

for(i=1;i<n;i++)

{

wt[i] = wt[i-1] +bt[i-1];

tat[i] = tat[i-1] +bt[i];

wtavg = wtavg + wt[i];

tatavg = tatavg + tat[i];

}

printf("\n\tPROCESS \tBURST TIME \t WAITING TIME \t TURNAROUND TIME\n");

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

printf("\n\t P%d \t\t %d \t\t %d \t\t %d", p[i], bt[i], wt[i], tat[i]);

printf("\nAverage Waiting Time -- %f", wtavg/n);

printf("\nAverage Turnaround Time -- %f", tatavg/n);

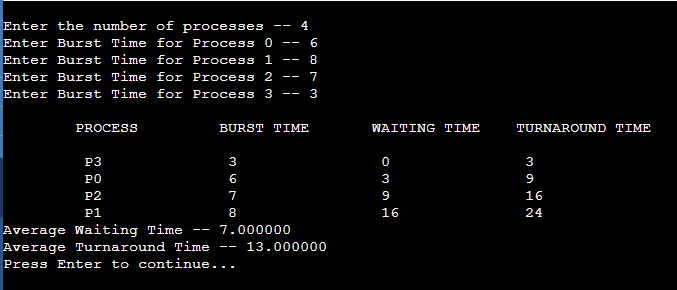
printf("\nPress Enter to continue...");

getchar(); // equivalent to getch()

return 0;

}

**OUTPUT:**

****