FCFS Scheduling Algorithm :

#include<stdio.h>

int waitingtime(int proc[],int n,int burst\_time[],int wait\_time[]) {

wait\_time[0]=0;

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

wait\_time[i]=burst\_time[i-1]+wait\_time[i-1];

return 0;}

int turnaroundtime(int proc[],int n,int burst\_time[],int wait\_time[],int tat[]) {

int i;

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

tat[i]=burst\_time[i]+wait\_time[i];

return 0;}

int avgtime(int proc[],int n,int burst\_time[]) {

int wait\_time[n],tat[n],total\_wt=0,total\_tat=0;

int i;

waitingtime(proc,n,burst\_time,wait\_time);

turnaroundtime(proc,n,burst\_time,wait\_time,tat);

printf("Processes Burst Waiting Turn around\n");

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

total\_wt=total\_wt+wait\_time[i];

total\_tat=total\_tat+tat[i];

printf("%d\t%d\t\t%d\t%d\n",i+1,burst\_time[i],wait\_time[i],tat[i]);}

printf("Average waiting time=%f\n",(float)total\_wt/(float)n);

printf("Average turn around time=%f\n",(float)total\_tat/(float)n);

return 0;}

int main() {

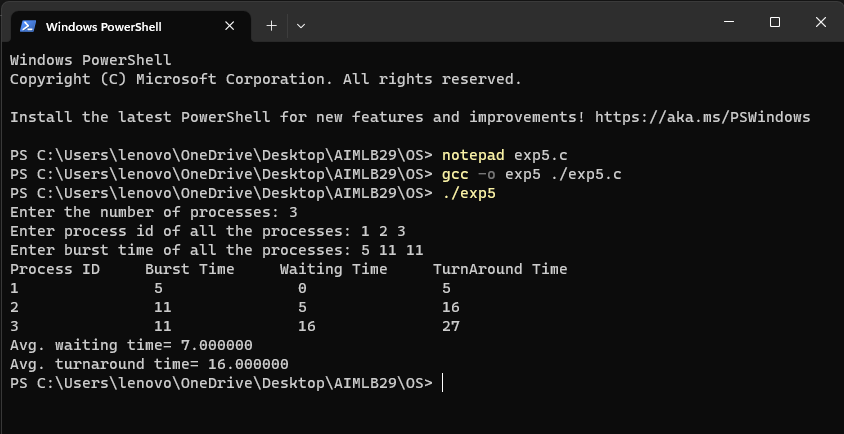
int proc[]={1,2,3};

int n=sizeof proc /sizeof proc[0];

int burst\_time[]={2,1,8};

avgtime(proc,n,burst\_time);

return 0;}



Priority Algorithm :

#include <stdio.h>

void swap(int \*a,int \*b){

int temp=\*a;

\*a=\*b;

\*b=temp;}

int main(){

int n;

printf("Enter Number of Processes: ");

scanf("%d",&n);

int burst[n],priority[n],index[n];

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

printf("Enter Burst Time and Priority Value for Process %d: ",i+1);

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

index[i]=i+1;}

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

int temp=priority[i],m=i;

for(int j=i;j<n;j++) {

if(priority[j] > temp) {

temp=priority[j];

m=j; } }

swap(&priority[i], &priority[m]);

swap(&burst[i], &burst[m]);

swap(&index[i],&index[m]); }

int t=0;

printf("Order of process Execution is\n");

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

printf("P%d is executed from %d to %d\n",index[i],t,t+burst[i]);

t+=burst[i]; }

printf("\n");

printf("Process Id\tBurst Time\tWait Time\n");

int wait\_time=0;

int total\_wait\_time = 0;

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

printf("P%d\t\t%d\t\t%d\n",index[i],burst[i],wait\_time);

total\_wait\_time += wait\_time;

wait\_time += burst[i]; }

float avg\_wait\_time = (float) total\_wait\_time / n;

printf("Average waiting time is %f\n", avg\_wait\_time);

int total\_Turn\_Around = 0;

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

total\_Turn\_Around += burst[i]; }

float avg\_Turn\_Around = (float) total\_Turn\_Around / n;

printf("Average TurnAround Time is %f",avg\_Turn\_Around);

return 0;}

