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**Course- Bsc.IT**

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**Subject- Operating System**

**IMPLEMENTATION OF FCFS SCHEDULING ALGORITHM**

**CODE:-**

#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[] = { 0, 1, 2, 3};

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

int burst\_time[] = {6, 8, 10, 11};

avgtime(proc, n, burst\_time);

return 0;

}

**OUTPUT:-**

