OPERATING SYSTEM - CS23431

EX 6(C)

PRIORITY SCHEDULING

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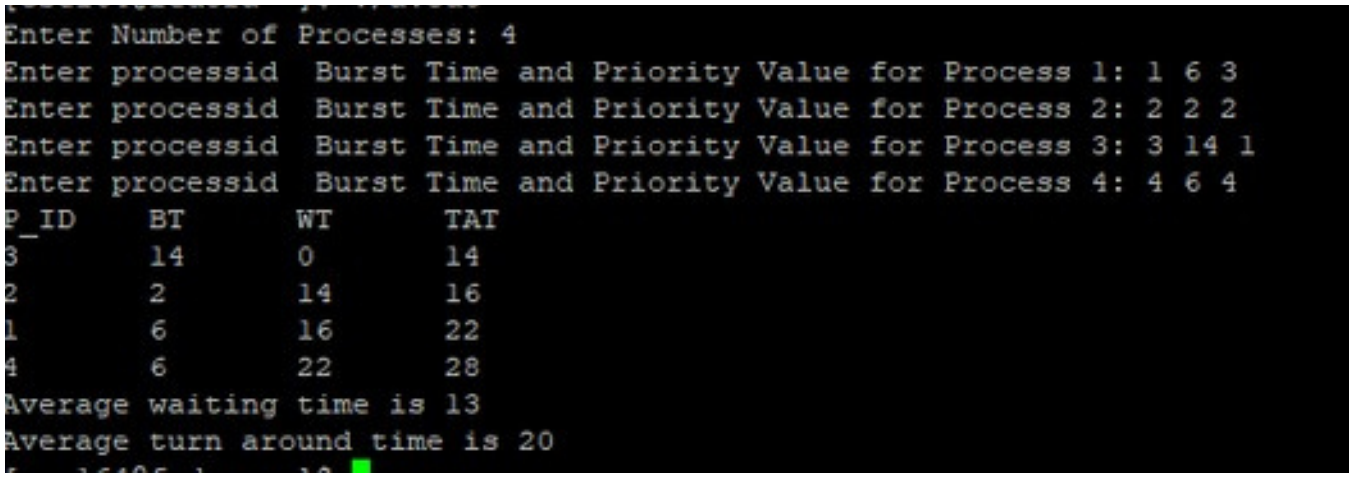
PROGRAM:

```
#include <stdio.h> int main() { int n; printf("Enter Number of Processes: "); scanf("%d", &n);

int pid[n], b[n], p[n];for (int i = 0; i < n; i++) { printf("Enter processid Burst Time and Priority Value
for Process %d: ", i + 1); scanf("%d %d %d", &pid[i], &b[i], &p[i]);}for (int i = 0; i < n; i++) { int




max_priority = p[i]; int max_index = i; int swapped = 0; for (int j = i + 1; j < n; j++) {              if (p[j] <
max_priority) {          max_priority = p[j];          max_index = j;          swapped = 1;          } } if
(swapped) {       int temp = p[i];       p[i] = p[max_index];       p[max_index] = temp;       temp = b[i];
b[i] = b[max_index];       b[max_index] = temp;              temp = pid[i];       pid[i] = pid[max_index];
pid[max_index] = temp; }}int wait_time = 0, totalwt = 0, totalturn =
0;printf("P_ID\tBT\tWT\tTAT\n");for (int i = 0; i < n; i++) { int tat = wait_time + b[i];
printf("%d\t%d\t%d\t%d\n", pid[i], b[i], wait_time, tat); totalwt += wait_time; totalturn += tat;
wait_time += b[i];}printf("Average waiting time is %d\n", totalwt / n);printf("Average turn around time is
%d\n", totalturn / n);return 0;

}
```

OUTPUT:


Enter Number of Processes: 4
Enter processid Burst Time and Priority Value for Process 1: 1 6 3
Enter processid Burst Time and Priority Value for Process 2: 2 2 2
Enter processid Burst Time and Priority Value for Process 3: 3 14 1
Enter processid Burst Time and Priority Value for Process 4: 4 6 4
P_ID BT WT TAT
3 14 0 14
2 2 14 16
1 6 16 22
4 6 22 28
Average waiting time is 13
Average turn around time is 20