OPERATING SYSTEM - CS23431

EXP 6(C)

PRIORITY SCHEDULING

NAME: S.KUMARAN
ROLL NO: 230701159

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 Process ID, Burst Time and Priority for Process %d: ", i + 1);
        scanf("%d %d %d", &pid[i], &b[i], &p[i]);
    }

    for (int i = 0; i < n; i++) {
        int min_priority = p[i];
        int min_index = i;

        for (int j = i + 1; j < n; j++) {
            if (p[j] < min_priority) {
```

```
            min_priority = p[j];
            min_index = j;
        }
    }

    if (min_index != i) {
        int temp;

        temp = p[i];     p[i] = p[min_index];     p[min_index] = temp;
        temp = b[i];     b[i] = b[min_index];     b[min_index] = temp;
        temp = pid[i];   pid[i] = pid[min_index]; pid[min_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: %d\n", totalwt / n);
printf("Average Turn Around Time: %d\n", totalturn / n);
```

```
    return 0;
}
```

OUTPUT: