```c
//Non-Preemptive Priority scheduling

#include <stdio.h>

struct np{
  int processId,BT,TAT,WT,pri;
};
struct np temp;

void sortAsc(struct np a[], int n)
{
    for(int i=0; i<n; i++)
        {
            for(int j=0; j<n-1; j++)
            {
                if(a[j].pri>a[j+1].pri)
                {
                    temp=a[j];
                    a[j]=a[j+1];
                    a[j+1]=temp;}
            }
        }
}
void sortDes(struct np a[], int n)
{
    for(int i=0; i<n; i++)
        {
            for(int j=0; j<n-1; j++)
            {
                if(a[j].pri<a[j+1].pri)
                {
                    temp=a[j];
                    a[j]=a[j+1];
                    a[j+1]=temp;}
            }
        }
}
int main() {
    int n,prio;
    printf("Enter no. of processes:");
    scanf("%d", &n);
    struct np a[n];

    printf("\nEnter process id, burst time and priority in the specified
order:\n");
    for(int i=0; i<n; i++)
        scanf("%d %d %d", &a[i].processId, &a[i].BT, &a[i].pri);
```

```
    printf("\nEnter highest priority:");
    scanf("%d", &prio);

    if(prio==1)
        sortAsc(a,n);
    else
        sortDes(a,n);

    float sum=0,sumWt=0,sumTat=0;

    for(int i=0; i<n; i++)
    {
        sum+=a[i].BT;
        a[i].TAT=sum;
        a[i].WT=a[i].TAT-a[i].BT;
        sumWt=sumWt+a[i].WT;
        sumTat=sumTat+a[i].TAT;
    }
    printf("\nProcess Id\tBurst Time\tPriority\tTurnaround Time\t\tWaiting
Time\n");
    for(int i=0; i<n; i++)
        printf("%d\t\t%d\t\t%d\t\t%d\t\t\t%d\n", a[i].processId, a[i].BT,
a[i].pri, a[i].TAT, a[i].WT);

    printf("\t\t\t\t\t\tAvg = %.2f\t\tAvg = %.2f", sumTat/n, sumWt/n);

    printf("\n --------------------");
    printf("\n| ");
    for(int i=0; i<n; i++)
        printf(" %d |", a[i].processId);
    printf("\n --------------------");
    return 0;
}
```

OUTPUT:

```
Enter no. of processes:5

Enter process id, burst time and priority in the specified order:
1 10 3
2 1 1
3 2 3
4 1 4
5 5 2

Enter highest priority:1

Process Id      Burst Time      Priority        Turnaround Time         Waiting Time
2               1               1               1                       0
5               5               2               6                       1
1               10              3               16                      6
3               2               3               18                      16
4               1               4               19                      18
                                                Avg = 12.00             Avg = 8.20
 --------------------
|  2 | 5 | 1 | 3 | 4 |
 --------------------
```