Code :

```c
#include <stdio.h>
void main() {
    int x, n, p[10], pp[10], pt[10], i, j, w[10], t[10];
    float awt = 0, atat = 0;
    printf("Enter the number of processes: ");
    scanf("%d", &n);
    printf("\nEnter Process Burst Time and Priority:\n");
    for (i = 0; i < n; i++) {
        printf("Process %d (Burst Time & Priority): ", i + 1);
        scanf("%d %d", &pt[i], &pp[i]);
        p[i] = i + 1;
    }
    // Sorting based on priority (Higher priority first)
    for (i = 0; i < n - 1; i++) {
        for (j = i + 1; j < n; j++) {
            if (pp[i] < pp[j]) {  // Higher priority (larger number) first
                // Swap priority
                x = pp[i];   pp[i] = pp[j];   pp[j] = x;
                // Swap burst time
                x = pt[i];    pt[i] = pt[j];   pt[j] = x;
                // Swap process number
                x = p[i];    p[i] = p[j];    p[j] = x;
            }
        }
    }
    // Waiting Time Calculation
    w[0] = 0;
    t[0] = pt[0];  // First process turnaround time = burst time
    atat = t[0];
    for (i = 1; i < n; i++) {
```

```
    w[i] = t[i - 1];  // Waiting time = Previous Turnaround Time

    awt += w[i];

    t[i] = w[i] + pt[i];  // Turnaround Time = Waiting Time + Burst Time

    atat += t[i];

  }

  // Displaying the Result

  printf("\nProcess\tBurst Time\tPriority\tWait Time\tTurn Around Time\n");

  printf("---------------------------------------------------------------\n");

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

    printf("\t\t%d\t\t%d\t\t%d\t\t%d\t\t%d\n", p[i], pt[i], pp[i], w[i], t[i]);

  }

  // Average Calculations

  printf("\nAverage Waiting Time: %.2f", awt / n);

  printf("\nAverage Turn Around Time: %.2f\n", atat / n);

}
```

Output :

```
Enter the number of processes: 4

Enter Process Burst Time and Priority:
Process 1 (Burst Time & Priority): 1 5
Process 2 (Burst Time & Priority): 2 8
Process 3 (Burst Time & Priority): 4 6
Process 4 (Burst Time & Priority): 3 5

Process Burst Time  Priority    Wait Time   Turn Around Time
----------------------------------------------------------------
        2           2           8           0           2
        3           4           6           2           6
        1           1           5           6           7
        4           3           5           7           10

Average Waiting Time: 3.75
Average Turn Around Time: 6.25


=== Code Exited With Errors ===
```