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Course - Bsc.IT 'A'   Student I'd - 20052010   Sem = 2
Subject - Operating System lab   Subject Code - PBI 202

Ans-2 -
```c
#include<stdio.h>
#include<conio.h>
#include<string.h>
int main()
{
    int et[20], at[10], n, i, j, temp, st[10], ft[10], wt[10],
        ta[10];
    int totwt=0, totta=0;
    float awt, ata;
    char pn[10][10], t[10];
    printf("Enter the number of process: ");
    scanf("%d", &n);
    for(i=0; i<n; i++)
    {
        printf("Enter process name, arrival time & exeution
                time : ");
        scanf("%s%d%d", pn[i], &at[i], &et[i]);
    }
    for(j=0; j<n; j++)
        for(j=0; j<n; j++)
        {
            if(et[i] < et[j])
            {
```

```c
        temp = at [i];
        at [i] = at [j];
        at [j] = temp;
        temp = et [i];
        et [i] = et [j];
        et [j] = temp;
        strcpy (t, pn[i]);
        strcpy (pn[i], pn[j]);
        strcpy (pn[j], t);
      }
    }
    for (i=0; i<n; i++)
    {
      if (i==0)
        st[i] = at[i];
      else
        st[i] = ft [i-1];
      wt [i] = st[i] - at [i];
      ft [i] = st[i] + et [i];
      ta [i] = ft [i] - at [i];
      totwt + = wt [i];
      totta + = ta[i];
    }
    awt = (float) totwt /n;
    ata = (float) totta /n;
    printf (" \n Pname \t arrival time \t execution time \t
            waiting time \t tat time ");
    for (i=0; i<n; i++)
```

```c
printf ("\n %s \t %.5d \t H %5d\'t \t %5d \t\t %
     5d", pn[i], at[i], et[i], wt[i], ta[i]);
printf ("\n Average waiting time is : %f", awt);

printf ("\n Average turnaroundtime is : %f", ata);

    getch();
    }
```