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Course - Bsc IT

Semester - 2nd

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Paper name - Operating System PBI 202

Type of paper - Regular - Practical

Campus - Dehradun

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SJF algorithm to find out turnaround time, waiting time average turnaround time and average waiting time.

```
#include <stdio.h>
```

```
void main()
```

```
{  
    int bt[20], P[20], wt[20], tat[20], j, n, total = 0, pos, temp;
```

```
    float avg_wt, avg_tat;
```

```
    n = 4;
```

```
    printf("Enter Burst Time: \n");
```

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

```
{
```

```
        printf("%d", i+1);
```

```
        scanf("%d", &bt[i]);
```

```
        P[i] = i+1;
```

```
}
```

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

```
{  
        pos = i
```

```
        for (j = i+1; j < n; j++)
```

```
{
```

```
            if (bt[j] < bt[pos])
```

```
                pos = j;
```

```
}
```



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```
temp = bt[i];
bt[i] = bt[pos];
bt[pos] = temp;
```

```
temp = p[i];
p[i] = p[pos];
p[pos] = temp;
}
```

```
wt[0] = 0;
for(i=1; i<n; i++)
```

```
{
    wt[i] = 0;
    for(j=0; j<i; j++)
        wt[i] += bt[j];
    total += wt[i];
}
```

```
avg_wt = (float) total / n;
total = 0;
```

```
printf("\nProcess\t Burst time \t waiting time \t turnaround time");
```

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

```
    tat[i] = bt[i] + wt[i];
```

```
    total += tat[i];
```

```
printf("\n %d\t\t %d\t\t %d\t\t %d", p[i], bt[i], wt[i], tat[i]);
```

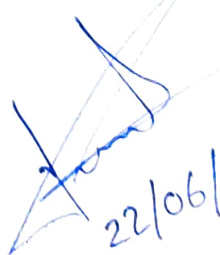
```
}
```

```
avg_tat = (float) total / n;
```

```
printf("\n\nAverage waiting time = %f", avg_wt);
```

```
printf("\n\nAverage Turnaround time = %f\n", avg_tat);
```

```
}
```


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