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Subject - Operating System

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Semester - 2

Section - A

Code - PBI-202

Q2) Code :-

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

```
int main()
```

```
{
```

```
int bt[20], p[20], wt[20], tat[20], i, j, h, total = 0, pos, temp;
```

```
float avg - wt, avg - tat;
```

```
printf("Enter the number of process");
```

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

```
{
```

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

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

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

```
}
```


// Sorting of burst time

for ($i = 0; i < h; i++$)

{

pos = i;

for ($j = j+1; j < h; j++$)

{

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

pos = j;

}

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

```
}
```



```
avg-tat = (float)total / n;
```

```
Printf("nAverage Waiting Time = %.f", avg-wt);
```

```
Printf("nAverage Turnaround time = %.fn", avg-tat);
```

```
return 0;
```

```
}
```

Amey


```
App C:\Users\AmanSenpai\Documents\jjhb.exe
Enter number of process:4
nEnter Burst Time:np1:20
p2:25
p3:10
p4:15
nProcesst    Burst Time    tWaiting TimetTurnaround Timenp3tt  10tt    0ttt10np4tt  15tt    10ttt25np1tt  20tt    25ttt4
5np2tt  25tt    45ttt70nnAverage Waiting Time=20.000000nAverage Turnaround Time=37.500000n
-----
Process exited after 76.15 seconds with return value 0
Press any key to continue . . .
```