

①

Question-2. // C Program to implement SJF CPU Scheduling Algorithm //

CODE:-

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

```
int main
```

```
{
```

```
int bt[20], p[20], wt[20], tat[20], i, j, n, to tal = 0, pos, temp;
```

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

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

```
scanf ("%d", &n);
```

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

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

```
{
```

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

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

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

```
}
```

```
// sorting of burst times
```

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

```
{
```

```
pos = i;
```

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

Print f ("n process Burst time twaiting timeturn  
around Time");

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

{

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

total += tat[i];

printf ("n 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 ("n Average Waiting Time = %.f", avg\_wt);

printf ("n Average Turnaround time = %.f", avg\_tat);

return 0;

}

Prems  
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