

Operating System Practical Exam

Q1 Output :

```
C:\Users\KARAN\OneDrive\Desktop\OS_Practical\Q1.exe
Enter the number of process : 4
Enter the time Quantum value : 3

Enter the respective process ids
P : 1
P : 2
P : 3
P : 4

Enter the Burst time for processes :
P1 : 6
P2 : 3
P3 : 9
P4 : 6

-----GANTT CHART-----
0|---P1---|3|---P2---|6|---P3---|9|---P4---|12|---P1---|15|---P3---|18|---P4---|21|---P3---|24

Processes | Burst time | Completion time | Waiting time | Response time | Turn around time
P1        | 6          | 15              | 9           | 0             | 15
P2        | 3          | 6               | 3           | 3             | 6
P3        | 9          | 24             | 15          | 6             | 24
P4        | 6          | 21             | 18          | 18            | 21

Total waiting time : 42
Average waiting time : 10.5
Total turnaround time : 66
Average turnaround time : 16.5
```

Q2 Output :

```
main.cpp
1 #include <stdio.h>
2 #include <sys/types.h>
3 #include <iostream>
4 #include <sys/wait.h>
5 #include <unistd.h>
6
7 using namespace std;
8
9 int main()
10 {
11     pid_t pid;
12     /* fork a child process */
13     pid = fork();
14     if (pid < 0)
15     {
16         /* error occurred */
17         cout<<stderr<< "Fork Failed"<<endl;
18         return 1;
19     }
20     else if (pid == 0)
21     {
22         /* child process */
23         printf("Child process is running\n");
24     }
25 }
```

```
/tmp/mk6NP8YG1n.o
Parent Complete
```