

Task 1:

```
task1.cpp
~/Desktop/PDC Task

1 #include <iostream>
2 #include <omp.h>
3
4 using namespace std;
5
6 int main(int argc, char* argv[])
7 {
8     int count = 0;           //Initially count will be 0
9
10    #pragma omp parallel num_threads(15)           //15 threads are being used
11    {
12        #pragma omp critical
13        {
14            int temp = count;           //local variable so the changes made are not changed globally
15            temp++;
16            count = temp;           //storing changed data in global
17        }
18    }
19
20    cout<<"Thread count = "<<count<<endl;
21
22    cout<<"Name = Hassan Shahzad"<<endl;
23    cout<<"Roll No = 18i-0441"<<endl;
24
25 }
```

Code of Task 1.1

```
hxn@hxn: ~/Desktop/PDC Task
hxn@hxn:~/Desktop/PDC Task$ ./task1
Thread count = 15
Name = Hassan Shahzad
Roll No = 18i-0441
hxn@hxn:~/Desktop/PDC Task$ ./task1
Thread count = 15
Name = Hassan Shahzad
Roll No = 18i-0441
hxn@hxn:~/Desktop/PDC Task$ ./task1
Thread count = 15
Name = Hassan Shahzad
Roll No = 18i-0441
hxn@hxn:~/Desktop/PDC Task$ ./task1
Thread count = 15
Name = Hassan Shahzad
Roll No = 18i-0441
hxn@hxn:~/Desktop/PDC Task$ |
```

Output of Task 1.1