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Roll No: 20P-0165

Section: 2A

```
1.cpp > main()
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     float num = 34.894545445424;
7     cout << "Value = " << num << endl;
8     return 0;
9 }
```

TERMINAL ...

2: Code



```
namiirr@hoonnete:~/SEMASTERno2/oop_lab/home_work06$ cd "/home/namiirr/SEMASTERno2/oop_lab/home_work06/" && g++ 1.cpp -o 1 && "./1"
Value = 34.8945
namiirr@hoonnete:~/SEMASTERno2/oop_lab/home_work06$
```

```
2.cpp > main()
1 #include <iostream>
2 #include <iomanip>
3 using namespace std;
4
5 int main()
6 {
7     float num = 34.265516571;
8     cout << "Value = " << num << endl;
9     cout << fixed << setprecision(10) << "Value = " << num << endl;
10    return 0;
11 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

2: Code

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/home/namiirr/SEMESTERno2/oop_lab/home_work06/" && g++ 2.cpp -o 2 && "/home/namiirr/SEMESTERno2/oop_lab/home_work06/2"
Value = 34.2655
Value = 34.2655181885
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$
```

```
3.cpp > main()
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     float payRate = 0;
7     int hoursWorked = 0;
8     cout << "Enter Pay Rate: ";
9     cin >> payRate;
10    cout << "Enter the Hours Worked: ";
11    cin >> hoursWorked;
12    cout << "The PayRate = " << payRate << "\n";
13    cout << "The Hours Worked = " << hoursWorked << "\n";
14
15    cout << "Enter the pay Rate and Hours Worked: ";
16    cin >> payRate >> hoursWorked;
17    cout << "The Pay Rate = " << payRate << endl;
18    cout << "The Hourse Worked = " << hoursWorked << endl;
19    return 0;
20 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

2: Code

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/home/namiirr/SEMESTERno2/oop_lab/home_work06/" && g++ 3.cpp -o 3 && "./3"
Enter Pay Rate: 45.5
Enter the Hours Worked: 4
The PayRate = 45.5
The Hours Worked = 4
Enter the pay Rate and Hours Worked: 45
5
The Pay Rate = 45
The Hourse Worked = 5
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$
```

```
4.cpp > main()
1 #include <iostream>
2 #include <cmath>
3 #include <string>
4
5 using namespace std;
6
7 int main()
8 {
9     double firstNumber = 0, secondNumber = 0;
10    string str;
11    cout << "Power: " << static_cast<int> (pow(2.5, 6.0)) << endl;
12
13    firstNumber = 12.5;
14    secondNumber = 3.0;
15    cout << "Power NO 2: " << firstNumber << " Power of " << pow(firstNumber, secondNumber) << endl;
16
17    cout << "The Square Root: " << sqrt(24.0) << endl;
18
19    firstNumber = pow(8.5, 2.5);
20
21    cout << firstNumber << endl;
22
23    str = "Programming in Cpp";
24    cout << "The Length of the String is = " << str.length() << endl;
25
26 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

2: Code

```
namiirr@hoannete:~/SEMESTERno2/oop_lab/home_work06$ cd "/home/namiirr/SEMESTERno2/oop_lab/home_work06/" && g++ 4.cpp -o 4 && "/home/namiirr/SEMESTERno2/oop_lab/home_work06/" 4
Power: 244
Power NO 2: 12.5 Power of 1953.12
The Square Root: 4.89898
210.643
The Length of the String is = 18
namiirr@hoannete:~/SEMESTERno2/oop_lab/home_work06$
```

5.cpp > main()

```
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     char ch[10];
7     cout << "Enter any string: ";
8     cin >> ch;
9     cout << "You Enter: " << ch << endl;
10    return 0;
11 }
```

PROBLEMS

OUTPUT

TERMINAL

DEBUG CONSOLE

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/
++ 5.cpp -o 5 && "/home/namiirr/SEMESTERno2/oop_lab/home_
Enter any string: Hello Hy
You Enter: Hello
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ ||
```

```
6.cpp > main()
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     char str[10];
7     cout << "Enter Your Name: ";
8     gets(str);
9     cout << "String You Enter is: ";
10    puts(str);
11    return 0;
12 }
```

PROBLEMS 1 OUTPUT TERMINAL DEBUG CONSOLE

2: Code + □ □ ^

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ Sir I got this error While Running this gets function
```

Command 'Sir' not found, did you mean:

command 'dir' from deb coreutils (8.30-3ubuntu2)

Try: sudo apt install <deb name>

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/home/namiirr/SEMESTERno2/oop_lab/home_work06/" &&
++ tempCodeRunnerFile.cpp -o tempCodeRunnerFile && "/home/namiirr/SEMESTERno2/oop_lab/home_work06/"tempCodeRu
unnerFile
```

tempCodeRunnerFile.cpp: In function 'int main()':

tempCodeRunnerFile.cpp:8:5: error: 'gets' was not declared in this scope; did you mean 'fgets'?

```
8 |     gets(str);
|     ^
|     fgets
```

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ 
```

```
7.cpp > main()
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     char ch;
7     cout << "Enter the character: ";
8     cin.get(ch);
9     cout << ch << endl;
10    return 0;
11}
```

---

PROBLEMS 1 OUTPUT TERMINAL DEBUG CONSOLE

```
namiirr@hoonnete:~/SEESTERno2/oop_lab/home_work06$ cd ..
++ 7.cpp -o 7 && "/home/namiirr/SEESTERno2/oop_lab/home_
Enter the character: a
a
namiirr@hoonnete:~/SEESTERno2/oop_lab/home_work06$
```

8.cpp > main()

```
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     char ch[100];
7     cout << "Enter Your Name: ";
8     cin.getline(ch, 15);
9     cout << "Hello " << ch << "!" << endl;
10    return 0;
11 }
```

---

PROBLEMS

1

OUTPUT

TERMINAL

DEBUG CONSOLE

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd
++ 8.cpp -o 8 && "/home/namiirr/SEMESTERno2/oop_lab/home_
Enter Your Name: Jawad Ahmed
Hello Jawad Ahmed!
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ █
```

```
9.cpp > main()
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     string str;
7     cout << "Enter Your Name: ";
8     getline(cin, str);
9     cout << "Hello " << str << "!\n";
10    return 0;
11 }
```

PROBLEMS 1 OUTPUT TERMINAL DEBUG CONSOLE

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd
++ 9.cpp -o 9 && "/home/namiirr/SEMESTERno2/oop_lab/home_
Enter Your Name: Rustam Ali
Hello Rustam Ali!
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ █
```

```
↳ 10.cpp > ⚡ main()
 1 #include <iostream>
 2 using namespace std;
 3
 4 int main()
 5 {
 6     cout.width(10);
 7     cout << "ITEMS" << endl;
 8     return 0;
 9 }
```

PROBLEMS ① OUTPUT TERMINAL DEBUG CONSOLE

```
namiirr@hoonnete:~/SEMASTERno2/oop_lab/home_work06$ cd
++ 10.cpp -o 10 && "/home/namiirr/SEMASTERno2/oop_lab/l
    ITEMS
namiirr@hoonnete:~/SEMASTERno2/oop_lab/home_work06$ █
```

```
11.cpp > main()
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     cout.width(10);
7     cout << "ITEMS";
8
9     cout.width(8);
10    cout << "COST";
11
12    cout.width(15);
13    cout << "TOTAL VALUES";
14    cout << endl;
15    return 0;
16 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/
++ 11.cpp -o 11 && "/home/namiirr/SEMESTERno2/oop_lab/home_
ITEMS      COST      TOTAL VALUES
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ █
```

```
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     int items[4] = {10, 8, 12, 5};
7     int cost[4] = {75, 100, 45, 6};
8
9     cout.width(5);
10    cout << "ITEMS";
11    cout.width(8);
12    cout << "COST";
13    cout.width(15);
14    cout << "TOTAL VALUES" << "\n";
15
16    int sum = 0;
17    for (int i = 0; i < 4; i++)
18    {
19        cout.width(5);
20        cout << items[i];
21
22        cout.width(8);
23        cout << cost[i];
24
25        int value = items[i] + cost[i];
26        cout.width(15);
27        cout << value << "\n";
28        sum += value;
29    }
30
31    cout << "\n Total Sum = " << sum << endl;
32
33 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/home/namiirr/S
oop_lab/home_work06/"12
ITEMS      COST      TOTAL VALUES
 10        75          85
   8        100         108
  12        45          57
   5         6           11
Total Sum = 261
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$
```

13.cpp > main()

```
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     int a, b;
7     cin >> a;
8     cin.ignore(100, '\n');
9     cin >> b;
10    cout << "a = " << a << endl;
11    cout << "b = " << b << endl;
12
13    return 0;
14 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
namiirr@hoonnete:~/SEMASTERno2/oop_lab/home_work0
++ 13.cpp -o 13 && "/home/namiirr/SEMASTERno2/oop
4
5
a = 4
b = 5
namiirr@hoonnete:~/SEMASTERno2/oop_lab/home_work0
```

```
↳ 14.cpp > ⚡ main()
 1 #include <iostream>
 2 using namespace std;
 3
 4 int main()
 5 {
 6     char ch;
 7     cout << "Enter a Character: ";
 8     cin.get(ch);
 9     cout << "The Character You Enter: " << ch << endl;
10     cin.get(ch);
11     cout << "Printing Second Time: " << ch << endl;
12
13     cin.putback(ch);
14     cin.get(ch);
15     cout << "After Put Back: " << ch << endl;
16     ch = cin.peek();
17
18     cout << "cin.peek() After Using: " << ch << endl;
19     return 0;
20 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
namiirr@hoonnete:~/SEMASTERno2/oop_lab/home_work06$ cd "/home/nam:
++ 14.cpp -o 14 && "/home/namiirr/SEMASTERno2/oop_lab/home_work06,
Enter a Character: ABCD
The Character You Enter: A
Printing Second Time: B
After Put Back: B
cin.peek() After Using: C
namiirr@hoonnete:~/SEMASTERno2/oop_lab/home_work06$ █
```

# Name: Jawad Ahmed



02

```
15.cpp > main()
1 #include <iostream>
2 using namespace std;
3
4 int main()
5 {
6     int a = 10, b = 20, c = 20, d = 40;
7     cout << "Enter 4 Integers: ";
8     cin >> a >> b >> c >> d;
9
10    cout << "a = " << a << " b = " << b << " c = " << c << " d = " << d << endl;
11    return 0;
12 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

2: Code

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/home/namiirr/SEMESTERno2/oop_lab"
++ 15.cpp -o 15 && "/home/namiirr/SEMESTERno2/oop_lab/home_work06/"15
Enter 4 Integers: 1 k
a = 1 b = 0 c = 20 d = 40
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$
```

```
16.cpp > ⚡ main()
 1 #include <iostream>
 2 using namespace std;
 3
 4 int main()
 5 {
 6     int a = 10, b = 20, c = 30, d = 40;
 7     cout << "Enter the Values of a, b, c, d";
 8     cin >> a >> b >> c >> d;
 9     cout << "a = " << a << " b = " << b << " c = " << c << " d = " << d << endl;
10     return 0;
11 }
```

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

2: Code

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/home/namiirr/SEMESTERno2/oop_lab/"
++ 16.cpp -o 16 && "/home/namiirr/SEMESTERno2/oop_lab/home_work06/"16
Enter the Values of a, b, c, d1 1.5 2 4
a = 1 b = 1 c = 0 d = 40
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$
```

```
↳ 17.cpp > ⚡ main()
 1 #include <iostream>
 2 using namespace std;
 3
 4 int main()
 5 {
 6     int a = 23, b = 34;
 7     cout << "Enter Value: ";
 8     cin >> a >> b;
 9     cout << "a = " << a << " b = " << b << endl;
10     cin.clear();
11     cin.ignore(200, '\n');
12     cout << "Enter Two Number Again:    ";
13     cin >> a >> b;
14     cout << "a = " << a << " b = " << b << endl;
15     return 0;
16 }
```

---

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

```
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/home/namiirr/SEMESTERno2/oop_lab/home_work06"
++ 17.cpp -o 17 && "/home/namiirr/SEMESTERno2/oop_lab/home_work06/17"
Enter Value: 1 k
a = 1 b = 0
Enter Two Number Again:    1 5
a = 1 b = 5
namiirr@hoonnete:~/SEMESTERno2/oop_lab/home_work06$
```

```
④ 18.cpp > ⌂ main()
1 #include <iostream>
2 #include <iomanip>
3
4 using namespace std;
5 const double PI = 3.145657658;
6
7 int main()
8 {
9     cout << "2 Decimal Points" << endl;
10    double radius = 12.67;
11    double height = 12.00;
12    cout << fixed << showpoint;
13    cout << setprecision(2);
14    cout << "Radius = " << radius << endl;
15    cout << "Height = " << height << endl;
16    cout << "Volume = " << PI * radius * radius * height << endl;
17
18    cout << "3 Decimal Points" << endl;
19
20    cout << fixed << showpoint;
21    cout << setprecision(3);
22    cout << "Radius = " << radius << endl;
23    cout << "Height = " << height << endl;
24    cout << "Volume = " << PI * radius * radius * height << endl;
25
26    cout << "4 Decimal Points" << endl;
27
28    cout << fixed << showpoint;
29    cout << setprecision(4);
30    cout << "Radius = " << radius << endl;
31    cout << "Height = " << height << endl;
32    cout << "Volume = " << PI * radius * radius * height << endl;
33
34    cout << "5 Decimal Points" << endl;
35
36    cout << fixed << showpoint;
37    cout << setprecision(5);
38    cout << "Radius = " << radius << endl;
39    cout << "Height = " << height << endl;
40    cout << "Volume = " << PI * radius * radius * height << endl;
41
42 }
```

```
namiirr@haonnete:~/SEMESTERno2/oop_lab/home_work06$ cd "/  
oop_lab/home_work06/"18  
2 Decimal Points  
Radius = 12.67  
Height = 12.00  
Volume = 6859.63  
3 Decimal Points  
Radius = 12.670  
Height = 12.000  
Volume = 6859.628  
4 Decimal Points  
Radius = 12.6700  
Height = 12.0000  
Volume = 6859.6276  
5 Decimal Points  
Radius = 12.67000  
Height = 12.00000  
Volume = 6859.62756  
namiirr@haonnete:~/SEMESTERno2/oop_lab/home_work06$ █
```

# Name: Jawad Ahmed

ROLL No: 20P-0165



02