

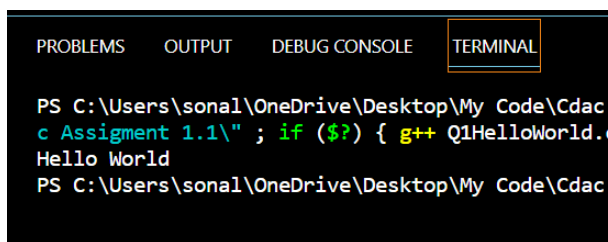
## C++ ASSIGNMENT 1.

1. Write a program to print "Hello World" on the screen.

### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     cout<<"Hello World";
6.     return 0;
7. }
```

### Output



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1\" ; if ($?) { g++ Q1HelloWorld.cpp
Hello World
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1\" ; if ($?) { g++ Q1HelloWorld.cpp
```

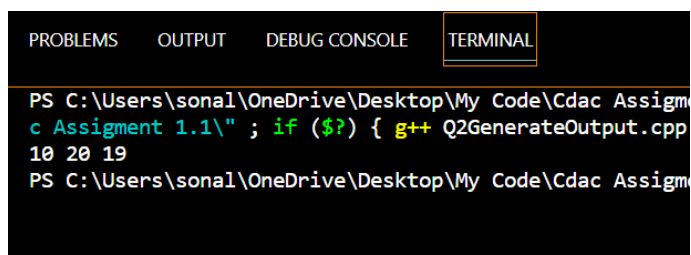
2. Write a program that generate the following output

10, 20, 19

Use an integer constant for 10, an arithmetic C++ ASSIGNMENT operator to generate the 20, and a decrement operator to generate 19.

### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     int a,b,c;
6.     a = 10;
7.     b = a*2;
8.     c = b--;
9.     cout << a<<" "<<c<<" "<<b ;
10.    return 0;
11. }
```



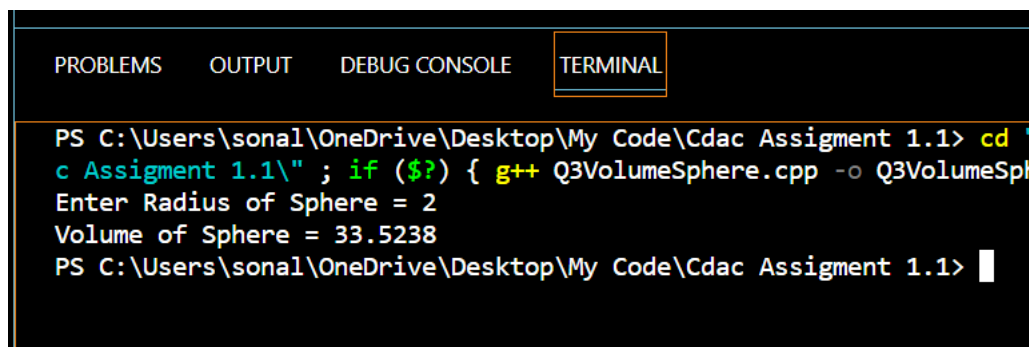
```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1\" ; if ($?) { g++ Q2GenerateOutput.cpp
10 20 19
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1\" ; if ($?) { g++ Q2GenerateOutput.cpp
```

3. Write a program that asks the user to enter a radius value and then compute the volume of a sphere with the input radius.

#### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     double r,v;
6.     cout << "Enter Radius of Sphere = ";
7.     cin >> r;
8.     v = (4.0/3.0) * (22.0/7.0) * (r*r*r);
9.     cout << "Volume of Sphere = " << v;
10. return 0;
11. }
```

#### Output

A screenshot of a C++ IDE terminal window. The terminal has tabs for 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', and 'TERMINAL', with 'TERMINAL' being the active tab. The command prompt shows the user navigating to the directory 'C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1' and running 'cd' followed by 'g++ Q3VolumeSphere.cpp -o Q3VolumeSphere'. The program then prompts 'Enter Radius of Sphere = 2', calculates the volume, and outputs 'Volume of Sphere = 33.5238'. The prompt returns to 'PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>'.

```
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1> cd "C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1\" ; if ($?) { g++ Q3VolumeSphere.cpp -o Q3VolumeSphere.exe }
Enter Radius of Sphere = 2
Volume of Sphere = 33.5238
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1> 
```

4. Write a program that takes three input of sides of a triangle. The program should indicate whether the triangle would be formed or not. If it can be formed it also indicates the type.

#### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     double s1,s2,s3;
6.     cout << "Enter lenght of Side 1 = ";
7.     cin >> s1;
8.     cout << "Enter lenght of Side 2 = ";
9.     cin >> s2;
10.    cout << "Enter lenght of Side 3 = ";
11.    cin >> s3;
12.    if(((s1+s2)>s3) || ((s2+s3)>s1) || ((s1+s3)>s2))
13.    {
14.        cout << "Triangle Will Form" << "\n";
15.        if(s1==s2==s3)
16.        {
17.            cout << "Its Equilateral Triangle";
```

```

18. }
19. else
20. if((s1==s2)|| (s2==s3)|| (s3==s1))
21. {
22. cout << "Its Isoceles Triangle";
23. }
24. else
25. if((s1!=s2)|| (s2!=s3)|| (s3!=s1))
26. {
27. cout << "Its Scalene Triangle";
28. }
29. }
30. else
31. {
32. cout << "Triangle Will not Form";
33. }
34. return 0;
35. }

```

## Output

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assigment 1.1\" ; if ($?) { g++ Q4TypeofTriangle.cpp -o Q4Type
Enter lenght of Side 1 = 1
Enter lenght of Side 2 = 2
Enter lenght of Side 3 = 3
Triangle Will not Form
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assigment 1.1\" ; if ($?) { g++ Q4TypeofTriangle.cpp -o Q4Type
Enter lenght of Side 1 = 6
Enter lenght of Side 2 = 6
Enter lenght of Side 3 = 6
Triangle Will Form
Its Equilateral Triangle
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assigment 1.1\" ; if ($?) { g++ Q4TypeofTriangle.cpp -o Q4Type
Enter lenght of Side 1 = 7
Enter lenght of Side 2 = 4
Enter lenght of Side 3 = 7
Triangle Will Form
Its Isoceles Triangle
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assigment 1.1\" ; if ($?) { g++ Q4TypeofTriangle.cpp -o Q4Type
Enter lenght of Side 1 = 5
Enter lenght of Side 2 = 7
Enter lenght of Side 3 = 4
Triangle Will Form
Its Scalene Triangle
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>

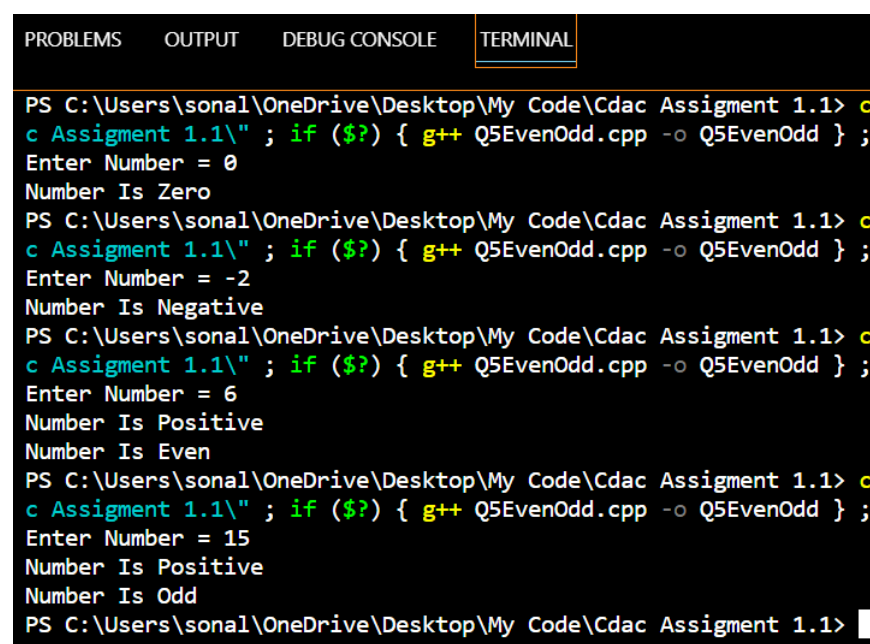
```

5. Write a program that takes one input as number and it will display whether the number is +ve, -ve or zero. If the number is +ve, then it will display whether the number is odd or even.

## Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     int a;
6.     cout << "Enter Number = ";
7.     cin >> a;
8.     if(a>0)
9.     {
10.        cout << "Number Is Positive" << "\n";
11.    }
12.    if((a%2)==0)
13.        cout << "Number Is Even";
14.    else
15.        cout << "Number Is Odd";
16. }
17. }
18. else
19. if(a<0)
20. {
21.    cout << "Number Is Negative";
22. }
23. else
24. if(a==0)
25. {
26.    cout << "Number Is Zero";
27. }
28. return 0;
29. }
```

## Output



The screenshot shows a terminal window with the following content:

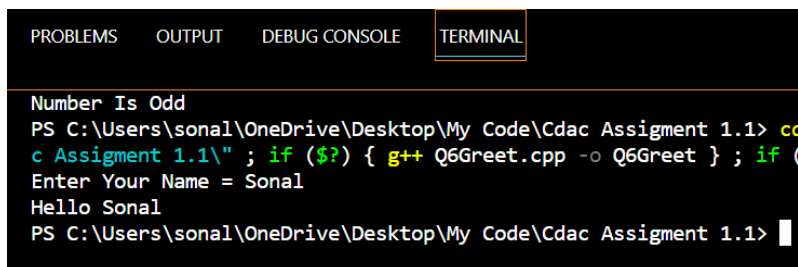
```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd
c Assignment 1.1\" ; if ($?) { g++ Q5EvenOdd.cpp -o Q5EvenOdd } ;
Enter Number = 0
Number Is Zero
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd
c Assignment 1.1\" ; if ($?) { g++ Q5EvenOdd.cpp -o Q5EvenOdd } ;
Enter Number = -2
Number Is Negative
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd
c Assignment 1.1\" ; if ($?) { g++ Q5EvenOdd.cpp -o Q5EvenOdd } ;
Enter Number = 6
Number Is Positive
Number Is Even
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd
c Assignment 1.1\" ; if ($?) { g++ Q5EvenOdd.cpp -o Q5EvenOdd } ;
Enter Number = 15
Number Is Positive
Number Is Odd
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> |
```

6. Write a program which takes username as input and it greets to user with his name.

### Code

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

### Output



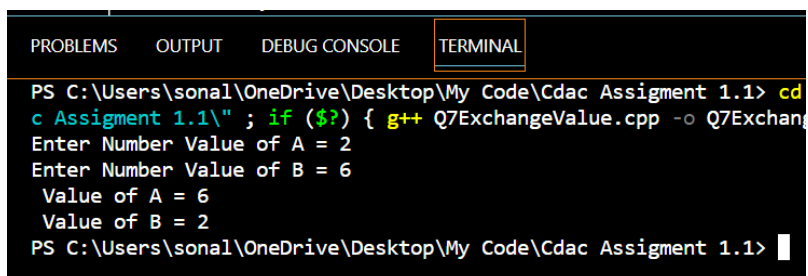
```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Number Is Odd
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd
c Assignment 1.1\ ; if ($?) { g++ Q6Greet.cpp -o Q6Greet } ; if (
Enter Your Name = Sonal
Hello Sonal
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> 
```

7. Write a program, which takes two integer numbers as input and it shows their exchanged value. (Don't use third variable)

### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     int a,b;
6.     cout << "Enter Number Value of A = ";
7.     cin >> a;
8.     cout << "Enter Number Value of B = ";
9.     cin >> b;
10.    cout << " Value of A = "<< b <<"\n";
11.    cout << " Value of B = "<< a <<"\n";
12.    return 0;
13. }
```

### Output



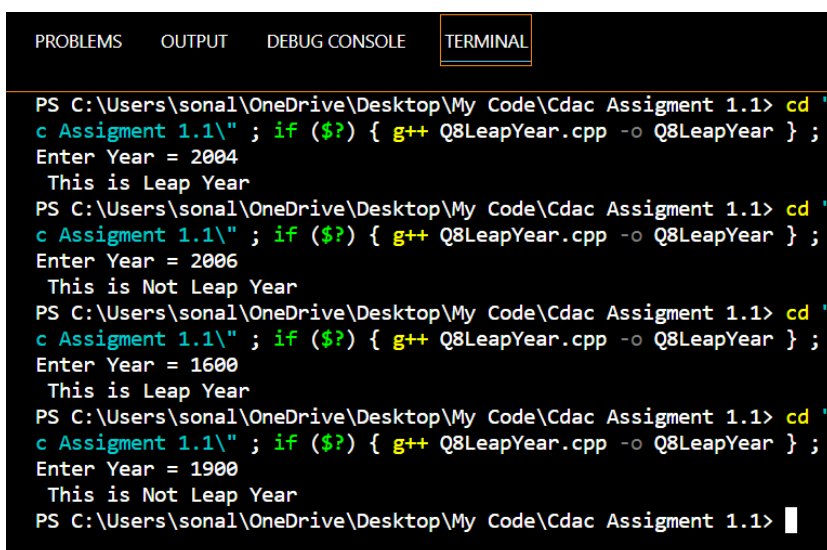
```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd
c Assignment 1.1\ ; if ($?) { g++ Q7ExchangeValue.cpp -o Q7Exchang
Enter Number Value of A = 2
Enter Number Value of B = 6
Value of A = 6
Value of B = 2
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> 
```

## 8. WAP to check Leap Year.

### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     int a,b;
6.     cout << "Enter Year = ";
7.     cin >> a;
8.     if((a%4)==00)
9.     {
10.        if((a%100)==00)
11.        {
12.            if((a%400)==00)
13.            {
14.                cout << " This is Leap Year";
15.            }
16.        }
17.    }
18.    cout << " This is Not Leap Year";
19. }
20. }
21. else
22. {
23.     cout << " This is Leap Year";
24. }
25. }
26. else
27. {
28.     cout << " This is Not Leap Year";
29. }
30. return 0;
31. }
```

### Output



The screenshot shows a terminal window with the 'TERMINAL' tab selected. It displays the execution of a C++ program that checks for leap years. The program prompts the user to enter a year and then outputs whether it is a leap year or not. The output shows four test cases: 2004 (Leap Year), 2006 (Not Leap Year), 1600 (Leap Year), and 1900 (Not Leap Year).

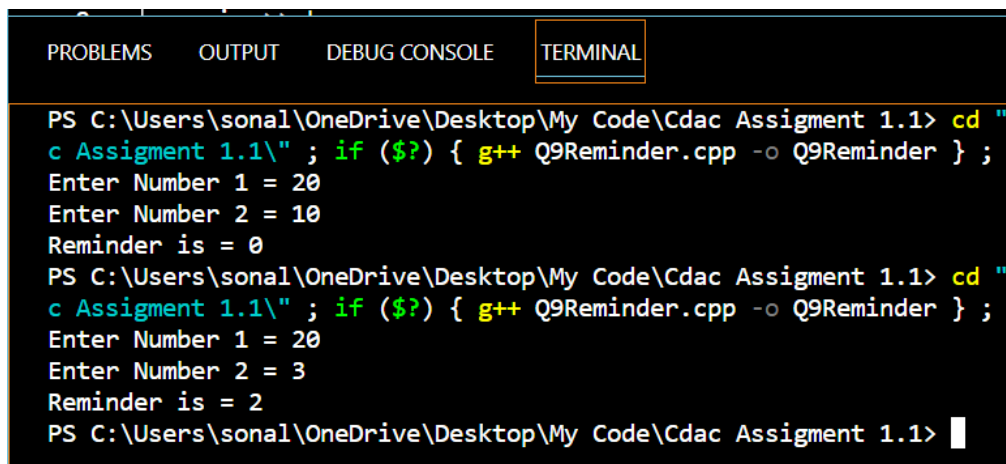
```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd "
c Assignment 1.1\" ; if ($?) { g++ Q8LeapYear.cpp -o Q8LeapYear } ;
Enter Year = 2004
This is Leap Year
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd "
c Assignment 1.1\" ; if ($?) { g++ Q8LeapYear.cpp -o Q8LeapYear } ;
Enter Year = 2006
This is Not Leap Year
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd "
c Assignment 1.1\" ; if ($?) { g++ Q8LeapYear.cpp -o Q8LeapYear } ;
Enter Year = 1600
This is Leap Year
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd "
c Assignment 1.1\" ; if ($?) { g++ Q8LeapYear.cpp -o Q8LeapYear } ;
Enter Year = 1900
This is Not Leap Year
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> |
```

9. WAP for finding remainder of division of 2 numbers.

### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     int a,b,c;
6.     cout << "Enter Number 1 = ";
7.     cin >> a;
8.     cout << "Enter Number 2 = ";
9.     cin >> b;
10.    c = a%b;
11.    cout<< "Reminder is = " << c;
12.    return 0;
13. }
```

### Output

A screenshot of a C++ IDE terminal window. The terminal has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, and TERMINAL, with TERMINAL selected. The prompt is PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>. The user enters 'cd "c Assignment 1.1\" ; if (\$?) { g++ Q9Reminder.cpp -o Q9Reminder } ;'. The program then prompts for 'Enter Number 1 = 20' and 'Enter Number 2 = 10', resulting in 'Reminder is = 0'. The user then runs the same command again, entering '20' and '3', resulting in 'Reminder is = 2'. The prompt returns to PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>.

```
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd "
c Assignment 1.1\" ; if ($?) { g++ Q9Reminder.cpp -o Q9Reminder } ;
Enter Number 1 = 20
Enter Number 2 = 10
Reminder is = 0
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> cd "
c Assignment 1.1\" ; if ($?) { g++ Q9Reminder.cpp -o Q9Reminder } ;
Enter Number 1 = 20
Enter Number 2 = 3
Reminder is = 2
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> 
```

10. WAP to calculate Area of Rectangle.

### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     int l,w,a;
6.     cout << "Enter Length = ";
7.     cin >> l;
8.     cout << "Enter Width = ";
9.     cin >> w;
10.    a = l*w;
11.    cout << "Area of Rectangle = " << a;
12.    return 0;
13. }
```

### Output

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> g++ Q10AreaRectangle.cpp -o Q10AreaRectangle.exe
c Assignment 1.1\" ; if ($?) { g++ Q10AreaRectangle.cpp -o Q10AreaRectangle.exe
Enter Length = 12
Enter Width = 8
Area of Rectangle = 96
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
```

11 .WAP to calculate Area of Square.

### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     int l,a;
6.     cout << "Enter Length of Side = ";
7.     cin >> l;
8.     a = (l*l);
9.     cout << "Area of Square = " << a;
10. return 0;
11. }
```

### Output

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1> g++ Q11AreaSquare.cpp -o Q11AreaSquare.exe
c Assignment 1.1\" ; if ($?) { g++ Q11AreaSquare.cpp -o Q11AreaSquare.exe
Enter Length of Side = 12
Area of Square = 144
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
```

12. WAP to calculate the area of Triangle.

### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     double b,h,a;
6.     cout << "Enter Length of Base = ";
7.     cin >> b;
8.     cout << "Enter Length of Height = ";
9.     cin >> h;
10. a = (1.0/2.0)*b*h;
11. cout << "Area of Triangle = " << a;
12. return 0;
13. }
```



## Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1> cd
c Assignment 1.1\" ; if ($?) { g++ Q12AreaTriangle.cpp -o Q12AreaTr
Enter Length of Base = 1
Enter Length of Height = 1
Area of Triangle = 0.5
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1> cd
c Assignment 1.1\" ; if ($?) { g++ Q12AreaTriangle.cpp -o Q12AreaTr
Enter Length of Base = 2
Enter Length of Height = 3
Area of Triangle = 6
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1> |
```

13. WAP to calculate Area and Circumference of Circle.

## Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     double r,a,c;
6.     cout << "Enter Radius = ";
7.     cin >> r;
8.     a = (22.0/7.0)*(r*r);
9.     c = (2.0)*(22.0/7.0)*r;
10.    cout << "Area of Circle = " << a << "\n";
11.    cout << "Circumfrence of Circle = " << c ;
12.    return 0;
13. }
```

## Output

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assignment 1.1\" ; if ($?) { g++ Q13AreaCircumfrenceCircle.cpp
13AreaCircumfrenceCircle }
Enter Radius = 12
Area of Circle = 452.571
Circumfrence of Circle = 75.4286
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
```

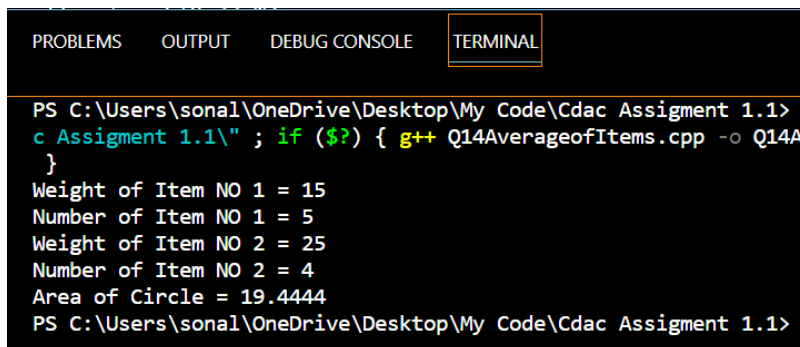
14. WAP for two item's weight (floating points' values) and number of purchase (floating points' values) and calculate the average value of the items.

Test Data: Weight - Item1: 15 No. of item1: 5 Weight - Item2: 25 No. of item2: 4 Expected Output: Average Value = 19.444444

### Code

```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     float w1,w2,n1,n2,avg;
6.     cout << "Weight of Item NO 1 = ";
7.     cin >> w1;
8.     cout << "Number of Item NO 1 = ";
9.     cin >> n1;
10.    cout << "Weight of Item NO 2 = ";
11.    cin >> w2;
12.    cout << "Number of Item NO 2 = ";
13.    cin >> n2;
14.    avg = (((w1*n1)+(w2*n2))/(n1+n2));
15.    cout << "Area of Circle = " << avg ;
16.    return 0;
17. }
```

### Output



```
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
c Assignment 1.1\" ; if ($?) { g++ Q14AverageofItems.cpp -o Q14A
}
Weight of Item NO 1 = 15
Number of Item NO 1 = 5
Weight of Item NO 2 = 25
Number of Item NO 2 = 4
Area of Circle = 19.4444
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
```

15. WAP to calculate a bike's average consumption from the given total distance (integer value) travelled (in km) and spent fuel.

Test Data: Input total distance in km: 350 Input total fuel spent in litres: 5 Expected Output: Average consumption (km/lit) 70.00

### Code

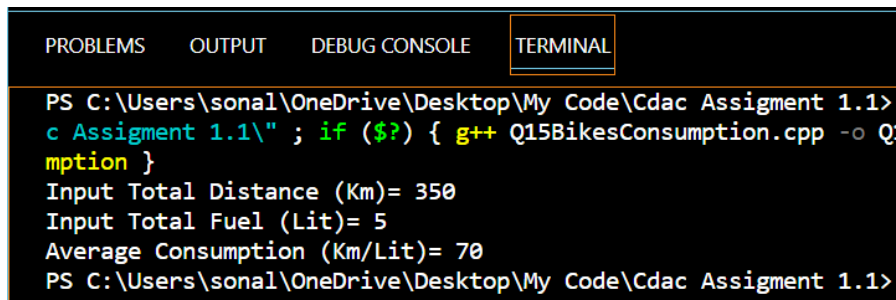
```
1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     float a,b,cons;
6.     cout << "Input Total Distance (Km)= ";
7.     cin >> a;
8.     cout << "Input Total Fuel (Lit)= ";
9.     cin >> b;
10.    cons = a/b;
```

```

11. cout << "Average Consumption (Km/Lit)= " << cons;
12. return 0;
13. }

```

### Output



```

PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assignment 1.1\" ; if ($?) { g++ Q15BikesConsumption.cpp -o Q
mption }
Input Total Distance (Km)= 350
Input Total Fuel (Lit)= 5
Average Consumption (Km/Lit)= 70
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>

```

16. Write a program that will give the grade of the student based on the percentage he got in the course.

Use the following criteria for assigning grades:

Grade = A ( when percentage  $\geq 60$ )

Grade = B ( when percentage  $\geq 50$  and percentage  $< 60$ )

Grade = C ( when percentage  $\geq 40$  and percentage  $< 50$ )

Grade = D ( when percentage  $\geq 30$  and percentage  $< 40$ )

Grade = E ( when percentage  $\geq 20$  and percentage  $< 30$ )

### Code

```

1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5.     double p;
6.     char g;
7.     cout << "Enter Percentange = ";
8.     cin >> p;
9.     if(p>=60)
10.    {
11.        g = 'A';
12.        cout<<"Grade "<< g;
13.    }
14.    else
15.    if((p>=50)&&(p<60))
16.    {
17.        g = 'B';
18.        cout<<"Grade "<< g;
19.    }
20.    else
21.    if((p>=40)&&(p<50))

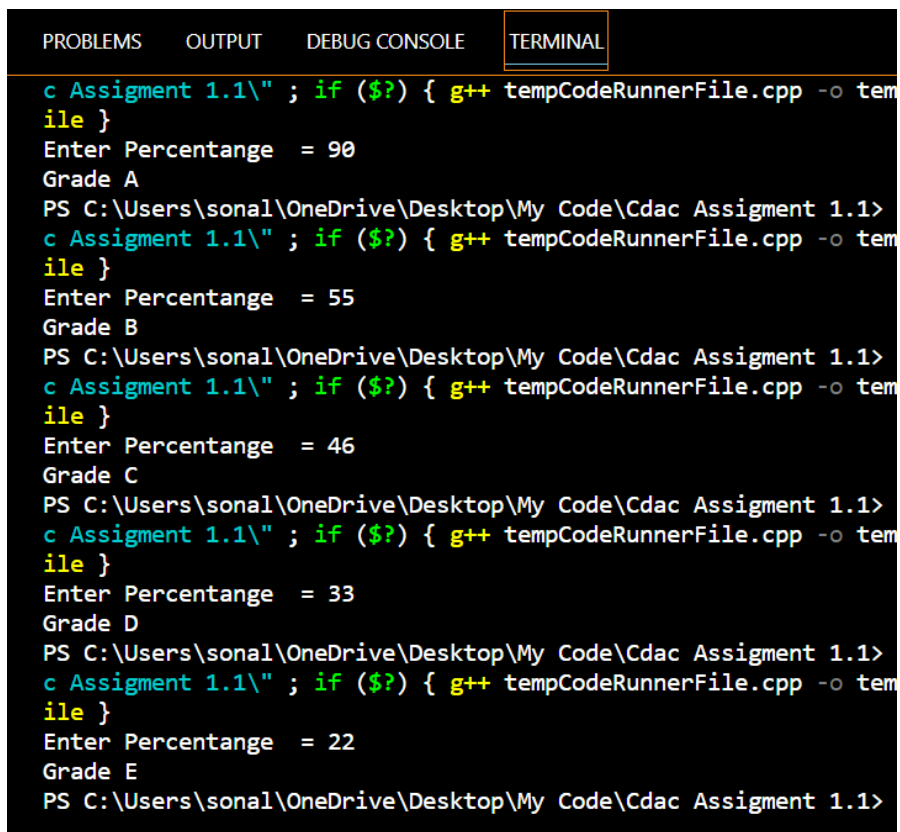
```

```

22. {
23. g = 'C';
24. cout<<"Grade "<< g;
25. }
26. else
27. if((p>=30)&&(p<40))
28. {
29. g = 'D';
30. cout<<"Grade "<< g;
31. }
32. else
33. if((p>=20)&&(p<30))
34. {
35. g = 'E';
36. cout<<"Grade "<< g;
37. }
38. return 0;
39. }

```

## Output



```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
c Assignment 1.1\" ; if ($?) { g++ tempCodeRunnerFile.cpp -o tem
ile }
Enter Percentange = 90
Grade A
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
c Assignment 1.1\" ; if ($?) { g++ tempCodeRunnerFile.cpp -o tem
ile }
Enter Percentange = 55
Grade B
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
c Assignment 1.1\" ; if ($?) { g++ tempCodeRunnerFile.cpp -o tem
ile }
Enter Percentange = 46
Grade C
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
c Assignment 1.1\" ; if ($?) { g++ tempCodeRunnerFile.cpp -o tem
ile }
Enter Percentange = 33
Grade D
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
c Assignment 1.1\" ; if ($?) { g++ tempCodeRunnerFile.cpp -o tem
ile }
Enter Percentange = 22
Grade E
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>

```

17. WAP to check whether a number is divisible by 5.

## Code

```

1. #include <iostream>
2. using namespace std;
3. int main()

```

```

4. {
5. int a,b;
6. cout << "Enter Number = ";
7. cin >> a;
8. if((a%5)==0)
9. {
10. cout<<"Number is Divisible by 5";
11. }
12. else
13. {
14. cout<<"Number is Not Divisible by 5";
15. }
16. return 0;
17. }

```

## Output

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assignment 1.1\" ; if ($?) { g++ Q17NumberDivisblebyFive.cpp
mberDivisblebyFive }
Enter Number = 1200
Number is Divisible by 5
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assignment 1.1\" ; if ($?) { g++ Q17NumberDivisblebyFive.cpp
mberDivisblebyFive }
Enter Number = 46
Number is Not Divisible by 5
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>

```

18. WAP to input basic salary of an employee and calculate its Gross salary according to following:

Basic Salary <= 10000 : HRA = 20%, DA = 80%

Basic Salary <= 20000 : HRA = 25%, DA = 90%

Basic Salary > 20000 : HRA = 30%, DA = 95%

## Code

```

1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5. float BSal ,HRA ,DA ,GrossSal;
6. cout << "Enter Basic Salary of Employee = ";
7. cin >> BSal ;
8. if(BSal<=10000)
9. {
10. HRA = BSal*0.2;
11. DA = BSal*0.8;
12. GrossSal = BSal + HRA + DA ;
13. cout << "Gross Salary of Empolyee is = " << GrossSal ;
14. }
15. else

```

```

16. if((BSal<=20000)&&(BSal>10000))
17. {
18. HRA = BSal*0.25;
19. DA = BSal*0.9;
20. GrossSal = BSal + HRA + DA ;
21. cout << "Gross Salary of Empolyee is = " << GrossSal ;
22. }
23. else
24. if(BSal>20000)
25. {
26. HRA = BSal*0.3;
27. DA = BSal*0.95;
28. GrossSal = BSal + HRA + DA ;
29. cout << "Gross Salary of Empolyee is = " << GrossSal ;
30. }
31. return 0;
32. }

```

## Output

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assigment 1.1\" ; if ($?) { g++ Q18SalaryOfEmployee.cpp -o Q18SalaryOfEmployee }
Enter Basic Salary of Employee = 32000
Gross Salary of Empolyee is = 72000
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assigment 1.1\" ; if ($?) { g++ Q18SalaryOfEmployee.cpp -o Q18SalaryOfEmployee }
Enter Basic Salary of Employee = 18000
Gross Salary of Empolyee is = 38700
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>
c Assigment 1.1\" ; if ($?) { g++ Q18SalaryOfEmployee.cpp -o Q18SalaryOfEmployee }
Enter Basic Salary of Employee = 9000
Gross Salary of Empolyee is = 18000
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assigment 1.1>

```

19. WAP to input electricity unit charges and calculate total electricity bill according to the given condition: For first 50 units Rs. 0.50/unit For next 100 units Rs. 0.75/unit For next 100 units Rs. 1.20/unit For unit above 250 Rs. 1.50/unit An additional surcharge of 20% is added to the bill

## Code

```

1. #include <iostream>
2. using namespace std;
3. int main()
4. {
5. float a,b;
6. cout << "Enter Number Of Units = ";
7. cin >> a;
8. if (a<=50)
9. {

```

```

10. b = (0.50*a);
11. cout << "Electricity Bill is = " << b ;
12. }
13. else
14. if ((a>50)&&(a<=150))
15. {
16. b = (0.75*a);
17. cout << "Electricity Bill is = " << b;
18. }
19. else
20. if ((a>150)&&(a<=250))
21. {
22. b = (1.20*a);
23. cout << "Electricity Bill is = " << b;
24. }
25. else
26. if (a>250)
27. {
28. b = (1.50*a)+ (0.20*a);
29. cout << "Electricity Bill is = " << b;
30. }
31. return 0;
32. }

```

## Output

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
c Assignment 1.1\" ; if ($?) { g++ Q19ElectricityBill.cpp -o Q1
ill }
Enter Number Of Units = 49
Electricity Bill is = 24.5
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
c Assignment 1.1\" ; if ($?) { g++ Q19ElectricityBill.cpp -o Q1
ill }
Enter Number Of Units = 149
Electricity Bill is = 111.75
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
c Assignment 1.1\" ; if ($?) { g++ Q19ElectricityBill.cpp -o Q1
ill }
Enter Number Of Units = 249
Electricity Bill is = 298.8
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>
c Assignment 1.1\" ; if ($?) { g++ Q19ElectricityBill.cpp -o Q1
ill }
Enter Number Of Units = 300
Electricity Bill is = 510
PS C:\Users\sonal\OneDrive\Desktop\My Code\Cdac Assignment 1.1>

```