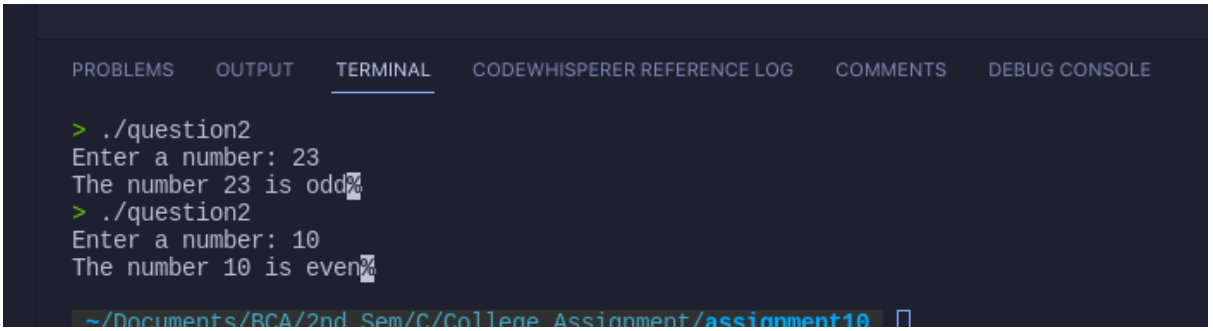
```c
// Program to check whether entered number is negative.
#include <stdio.h>
int main()
{
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    if (num < 0)
    {
        printf("The number %d is negative", num);
    }
    return 0;
}
```

```c
// Program to determine whether the entered number is even or odd.
#include <stdio.h>
int main()
{
    int num;
    printf("Enter a number: ");
    scanf("%d", &num);
    if (num % 2 == 0)
    {
        printf("The number %d is even", num);
    }
    else
    {
        printf("The number %d is odd", num);
    }
    return 0;
}
```



```c
/*C program that input Cost Price(CP) and Selling Price(SP) of a product
and calculate profit or loss.*/
#include <stdio.h>
int main()
{
    float CP, SP, profit, loss;
    printf("Enter Cost Price: ");
    scanf("%f", &CP);
    printf("Enter Selling Price: ");
    scanf("%f", &SP);
    if (SP > CP)
    {
        profit = SP - CP;
        printf("Profit = %.2f", profit);
    }
    else
    {
        loss = CP - SP;
        printf("Loss = %.2f", loss);
    }
    return 0;
}

```

```
PROBLEMS  OUTPUT  TERMINAL  CODEWHISPERER REFERENCE LOG  COMMENTS  DEBUG CONSOLE

> ./question3
Enter Cost Price: 32
Enter Selling Price: 24
Loss = 8.00%
> ./question3
Enter Cost Price: 355
Enter Selling Price: 554
Profit = 199.00%

~/Documents/BCA/2nd Sem/C/College_Assignment/assignment10
```

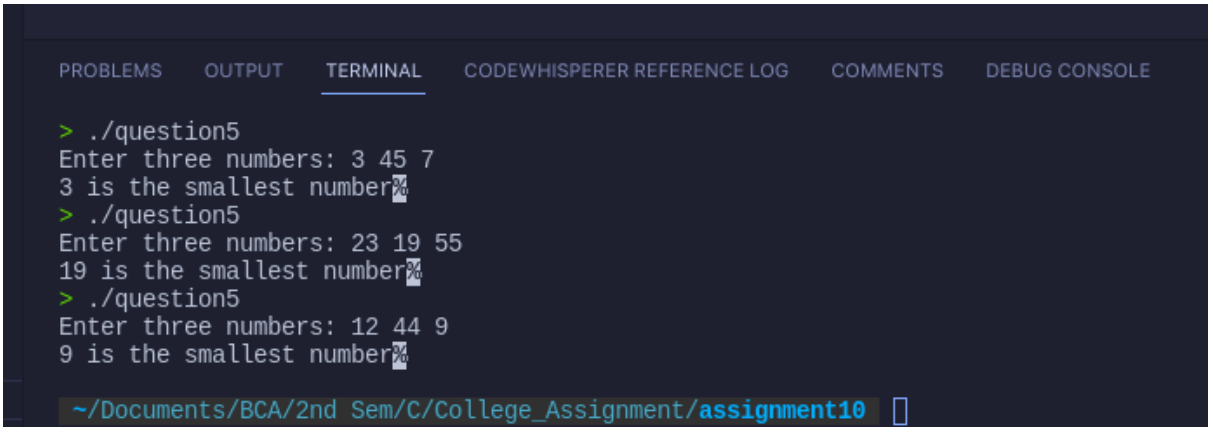
```c
// Program to determine the roots of quadratic equation ax^2 + bx + c = 0
#include <math.h>
#include <stdio.h>
int main()
{
    float a, b, c, d, root1, root2, real, img;
    printf("Enter the coefficients a, b and c: ");
    scanf("%f%f%f", &a, &b, &c);
    d = b * b - 4 * a * c;
    if (d < 0)
    {
        printf("Imaginary Roots.");
        d = sqrt(fabs(d));
        real = -b / (2 * a);
        img = d / (2 * a);
        printf("\nRoot1 = %.2f +i %.2f", real, img);
        printf("\nRoot2 = %.2f -i %.2f", real, img);
    }
    else
    {
        printf("Real Roots.");
        d = sqrt(d);
        root1 = (-b + d) / (2 * a);
        root2 = (-b - d) / (2 * a);
        printf("\nRoot1 = %.2f \t Root2 = %.2f", root1, root2);
    }
    return 0;
}
```

PROBLEMS OUTPUT TERMINAL CODEWHISPERER REFERENCE LOG COMMENTS DEBUG CONSOLE

```
> ./question4
Enter the coefficients a, b and c: 2 8 3
Real Roots.
Root1 = -0.42    Root2 = -3.58%

~/Documents/BCA/2nd Sem/C/College_Assignment/assignment10
```

```c
// Program that find the smallest among three numbers using nested if else statement
#include <stdio.h>
int main()
{
    int n1, n2, n3;
    printf("Enter three numbers: ");
    scanf("%d%d%d", &n1, &n2, &n3);
    if (n1 < n2)
    {
        if (n1 < n3)
        {
            printf("%d is the smallest number", n1);
        }
        else
        {
            printf("%d is the smallest number", n3);
        }
    }
    else
    {
        if (n2 < n3)
        {
            printf("%d is the smallest number", n2);
        }
        else
        {
            printf("%d is the smallest number", n3);
        }
    }
}
```



```c
/*Program to that reads the marks of four subject of a student from the user and
compute percentage and grade of the student using the following conditions:
percentage >= 80, grade = A
percentage <80 and per>=60, grade = B
percentage <60 and per>=50, grade  = C
percentage <50 and per>=40, grade = D
percentage <40, grade = F*/

#include <stdio.h>
int main()
{
    float m1, m2, m3, m4, per;
    char grade;
    printf("Enter the marks of four subject: ");
    scanf("%f%f%f%f", &m1, &m2, &m3, &m4);
    per = (m1 + m2 + m3 + m4) / 4;
    if (per >= 80)
    {
        grade = 'A';
    }
    else if (per < 80 && per >= 60)
    {
        grade = 'B';
    }
    else if (per < 60 && per >= 50)
    {
        grade = 'C';
    }
    else if (per < 50 && per >= 40)
    {
        grade = 'D';
    }
    else
    {
        grade = 'F';
    }
    printf("Percentage is %f\n Grade is %c", per, grade);
    return 0;
}
```

```
PROBLEMS  OUTPUT  TERMINAL  CODEWHISPERER REFERENCE LOG  COMMENTS  DEBUG CONSOLE

> ./question6
Enter the marks of four subject: 87 45 89 65
Percentage is 71.500000
 Grade is B%

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```

```c
/*Program that find the largest among three numbers using logical
operators and else if statement*/
#include <stdio.h>
int main()
{
    int n1, n2, n3;
    printf("Enter three numbers:");
    scanf("%d%d%d", &n1, &n2, &n3);
    if (n1 > n2 && n1 > n3)
    {
        printf("%d is the largest number", n1);
    }
    else if (n2 > n1 && n2 > n3)
    {
        printf("%d is the largest number", n2);
    }
    else
    {
        printf("%d is the largest number", n3);
    }
    return 0;
}
```