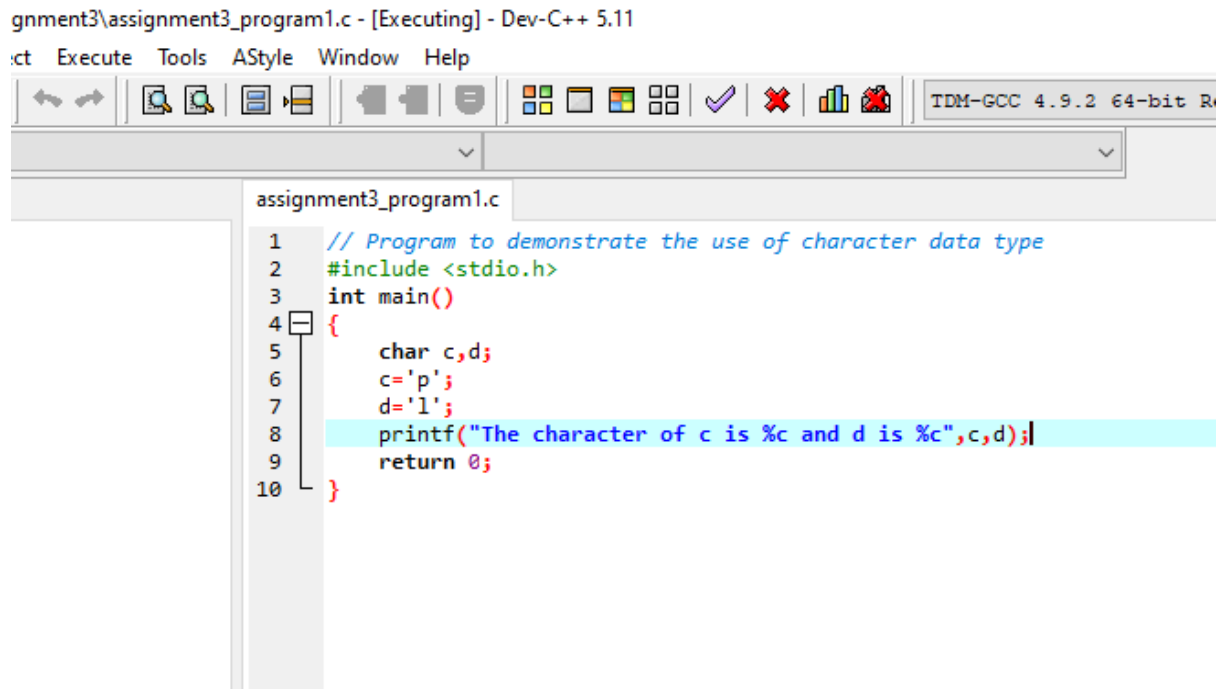


1. Program to demonstrate the use of character data type.

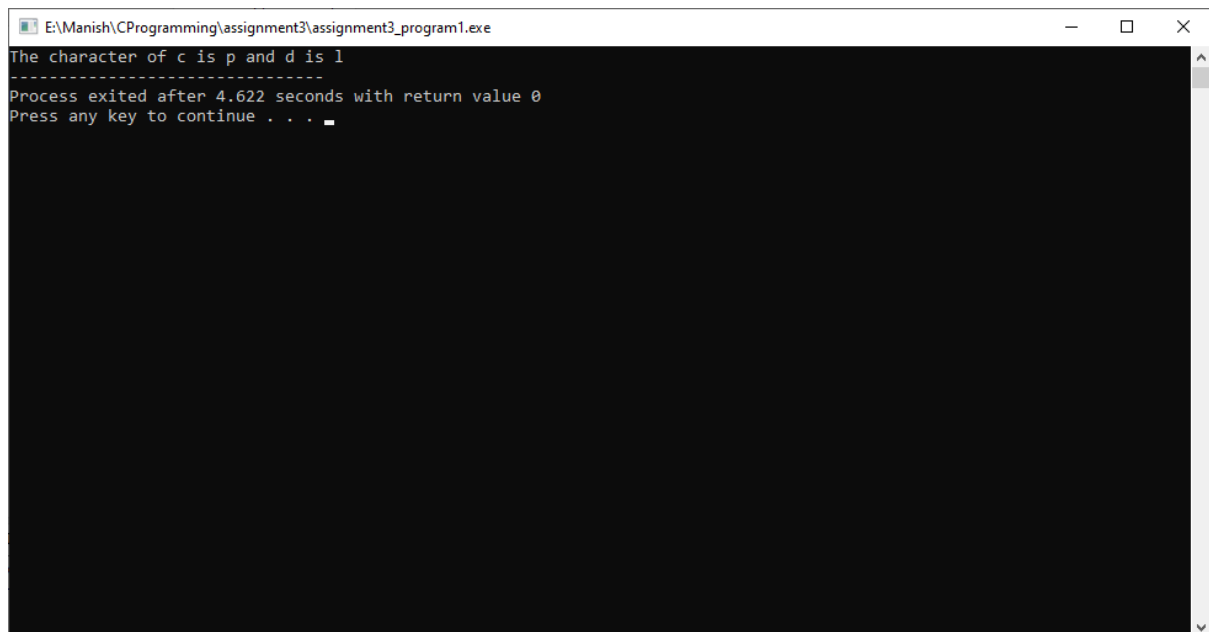
Code:



The screenshot shows the Dev-C++ IDE interface. The title bar reads "gnment3\assignment3_program1.c - [Executing] - Dev-C++ 5.11". The menu bar includes "File", "Edit", "Execute", "Tools", "AStyle", "Window", and "Help". The toolbar contains various icons for file operations, execution, and debugging. The compiler version is "TDM-GCC 4.9.2 64-bit R". The code editor displays the following C code:

```
1 // Program to demonstrate the use of character data type
2 #include <stdio.h>
3 int main()
4 {
5     char c,d;
6     c='p';
7     d='l';
8     printf("The character of c is %c and d is %c",c,d);
9     return 0;
10 }
```

Output:

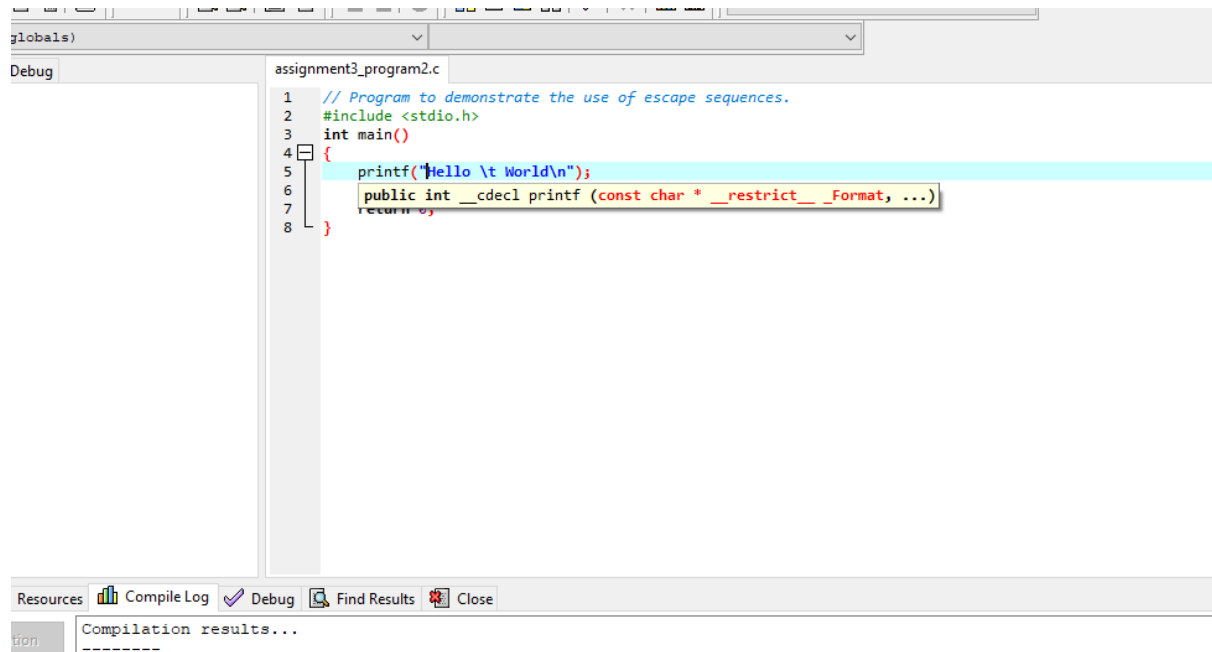


The screenshot shows the output window of the program. The title bar reads "E:\Manish\CProgramming\assignment3\assignment3_program1.exe". The output text is:

```
The character of c is p and d is l
-----
Process exited after 4.622 seconds with return value 0
Press any key to continue . . .
```

2. Program to demonstrate the use of escape sequences.

Code

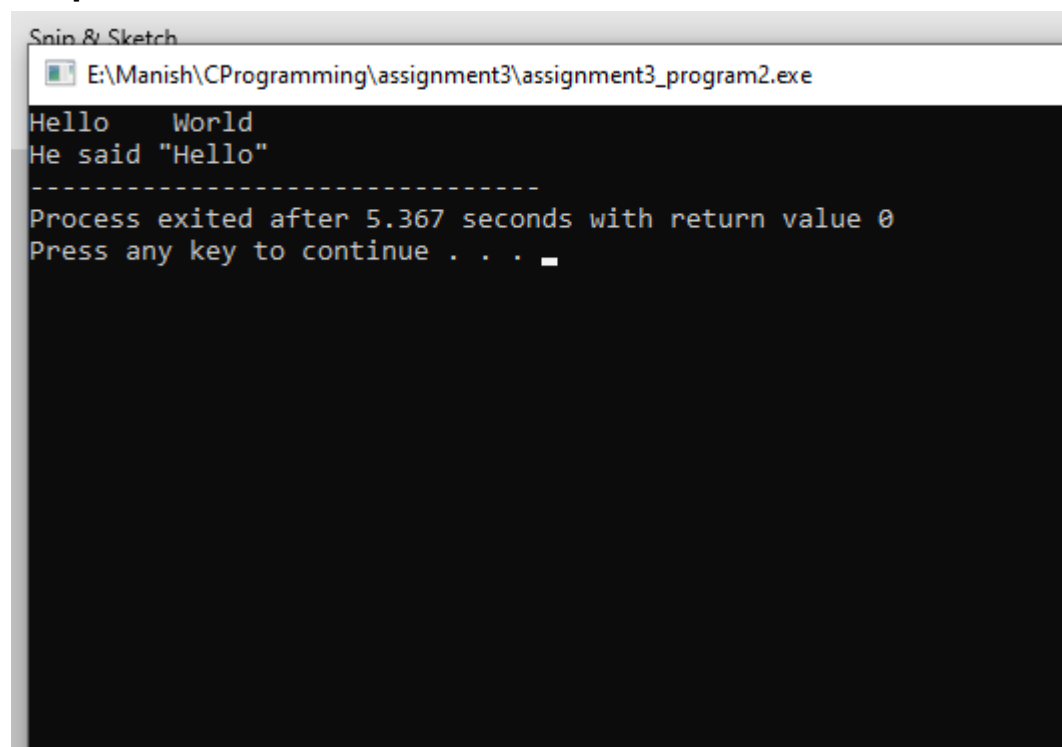


The screenshot shows a code editor window titled "assignment3_program2.c". The code is as follows:

```
1 // Program to demonstrate the use of escape sequences.
2 #include <stdio.h>
3 int main()
4 {
5     printf("Hello \t World\n");
6     public int __cdecl printf (const char * __restrict__ _Format, ...)
7     return 0;
8 }
```

The editor has a "globals" pane on the left and a "Debug" pane at the bottom. The "Debug" pane shows "Compilation results..." and is currently empty.

Output



The screenshot shows a command prompt window titled "Spin & Sketch". The output of the program is as follows:

```
E:\Manish\CProgramming\assignment3\assignment3_program2.exe
Hello    World
He said "Hello"
-----
Process exited after 5.367 seconds with return value 0
Press any key to continue . . .
```

3. Program to compute the area of a circle using symbolic constant.

Code

```
assignment3_program2.c  assignment3_program3.c
1 // Program to compute the area of a circle using symbolic constant.
2 #include <stdio.h>
3 int main()
4 {
5     float radius,area;
6     printf("\n Enter the radius of a circle: ");
7     scanf("%f",&radius);
8     float PI = 3.1416;
9     area = PI * radius * radius;
10    printf("\n The area of the circle with radius %.2f is %.2f",radius,area);
11    return 0;
12 }
```

Output

```
1 // Program to compute the area of a circle using symbolic constant.
2 #include <stdio.h>
E:\Manish\CProgramming\assignment3\assignment3_program3.exe
Enter the radius of a circle: 15
The area of the circle with radius 15.00 is 706.86
-----
Process exited after 6.682 seconds with return value 0
Press any key to continue . . .
```

4. Program to compute an area and circumference of a circle.

Code

```
1 // Program to compute an area and circumference of a circle.
2
3 #include <stdio.h>
4 int main()
5 {
6     float radius, area, circumference;
7     printf("Enter the radius of the circle: ");
8     scanf("%f", &radius);
9     area = 3.14 * radius * radius;
10    circumference = 2 * 3.14 * radius;
11    printf("Area of the circle = %f\n", area);
12    printf("Circumference of the circle = %f\n", circumference);
13    return 0;
14 }
```

Output

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

> ./question4
Enter the radius of the circle: 23
Area of the circle = 1661.060059
Circumference of the circle = 144.440002
```

```
~/Documents/BCA/2nd Sem/C/College_Assignment/assignment3
```

✓ CodeWhisperer

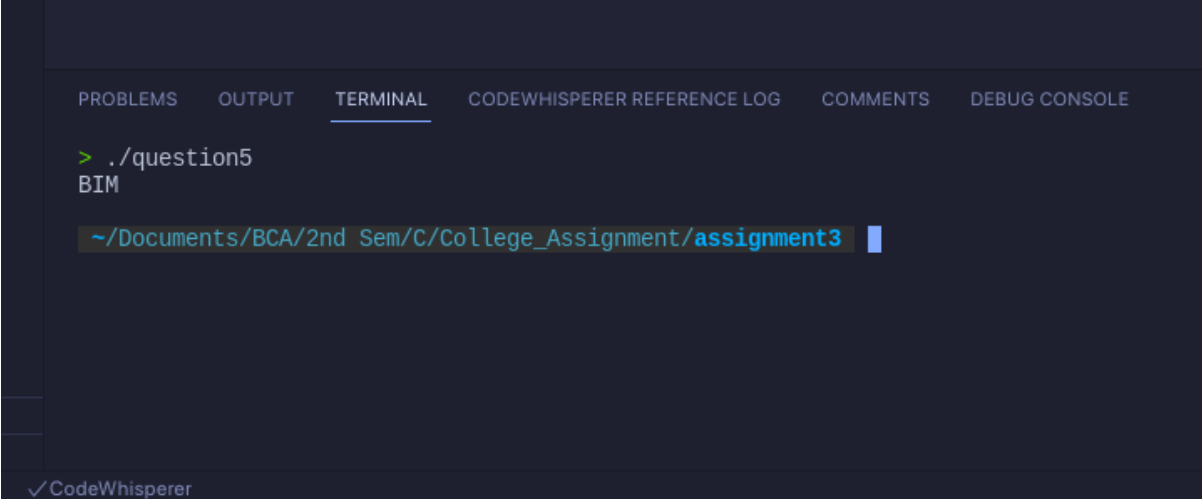
5. Program to display BIM.

Code



```
1 // Program to display BIM.
2
3 #include <stdio.h>
4 int main()
5 {
6     printf("BIM\n");
7     return 0;
8 }
```

Output



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

> ./question5
BIM

~/Documents/BCA/2nd Sem/C/College_Assignment/assignment3
```

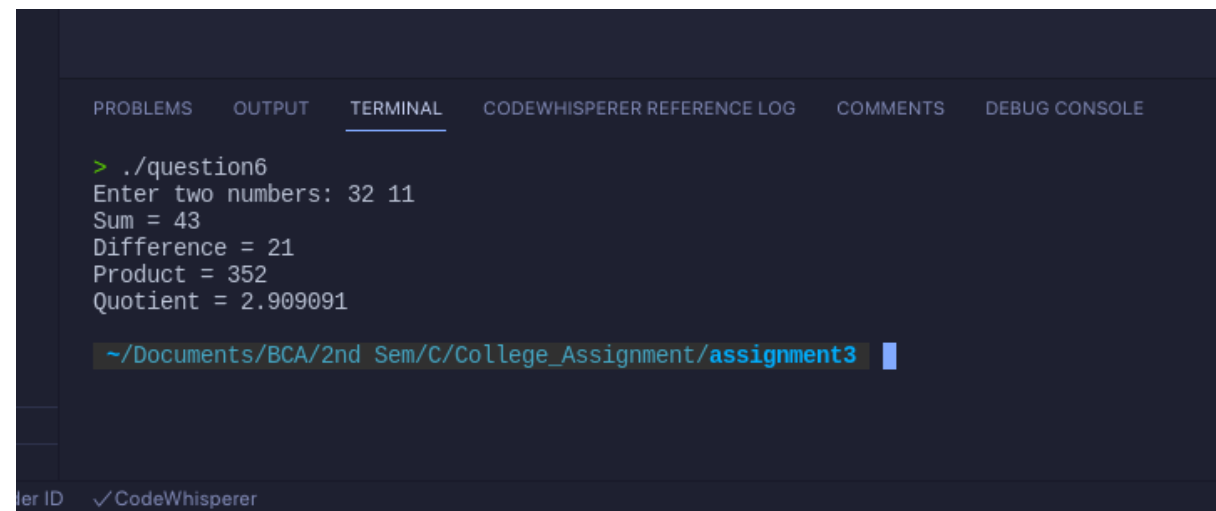
✓ CodeWhisperer

6. Program to add, subtract, multiply, and divide two whole numbers.

Code

```
1 // Program to add, subtract, multiply, and divide two whole numbers.
2
3 #include <stdio.h>
4 int main()
5 {
6     int num1, num2;
7     printf("Enter two numbers: ");
8     scanf("%d %d", &num1, &num2);
9     printf("Sum = %d\n", num1 + num2);
10    printf("Difference = %d\n", num1 - num2);
11    printf("Product = %d\n", num1 * num2);
12    printf("Quotient = %f\n", (float)num1 / num2);
13    return 0;
14 }
```

Output



The screenshot shows a code editor with a terminal window. The terminal output is as follows:

```
> ./question6
Enter two numbers: 32 11
Sum = 43
Difference = 21
Product = 352
Quotient = 2.909091
```

The file path shown in the terminal is `~/Documents/BCA/2nd Sem/C/College_Assignment/assignment3`.

7. Program to find simple interest.

Code

```
1 // Program to find simple interest.
2
3 #include <stdio.h>
4 int main()
5 {
6     int p, t;
7     float r, si;
8     printf("Enter the value of p, t, r: ");
9     scanf("%d%d%f", &p, &t, &r);
10    si = (p * t * r) / 100;
11    printf("Simple interest = %f", si);
12    return 0;
13 }
```

Output

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

> ./question7
Enter the value of p, t, r: 2300 3 12.5
Simple interest = 862.500000%

~/Documents/BCA/2nd Sem/C/College_Assignment/assignment3
```

8. Program to convert a temperature given in Celsius to Fahrenheit.

Code

```
1 // Program to convert a temperature given in Celsius to Fahrenheit.
2
3 #include <stdio.h>
4 int main()
5 {
6     float celsius, fahrenheit;
7     printf("Enter temperature in Celsius: ");
8     scanf("%f", &celsius);
9     fahrenheit = (celsius * 9 / 5) + 32;
10    printf("Temperature in Fahrenheit: %.2f", fahrenheit);
11    return 0;
12 }
```

Output

PROBLEMS OUTPUT TERMINAL CODEWHISPERER REFERENCE LOG COMMENTS DEBUG CONSOLE

```
> ./question8
Enter temperature in Celsius: 32.5
Temperature in Fahrenheit: 90.50%
```

```
~/Documents/BCA/2nd Sem/C/College_Assignment/assignment3
```

ler ID ✓ CodeWhisperer