

The above program is a C program that combines three different programs into one with a switch case. The three programs are:

1. A program that prints a list of fruits.
2. A program that prints a sequence of numbers.
3. A program that demonstrates the use of unions.

The switch case allows the user to choose which program to execute. The first program is executed if the user chooses 1, the second program is executed if the user chooses 2, and the third program is executed if the user chooses 3.

Here is a more detailed description of each of the three programs:

Program 1: Print fruits

This program uses an array to store a list of fruits. The program then iterates over the array and prints each fruit to the console.

Program 2: Print numbers

This program uses a for loop to iterate from 5 to 10. For each iteration, the program prints the current number to the console.

Program 3: Print union

This program demonstrates the use of unions. A union is a data type that can store different types of data in the same memory location. The program creates a union variable called letter1. This variable can store either a char or an int.

The program first sets the code member of the union variable to 65. This will cause the union variable to store the character 'A'. The program then prints the letter member of the union variable to the console. This will print the character 'A'.

Next, the program sets the letter member of the union variable to 'B'. This will cause the union variable to store the character 'B'. The program then prints the code member of the union variable to the console. This will print the number 66.

Finally, the program prints the letter member of the union variable to the console. This will print the character 'B'.

Combined program with switch case

The combined program with switch case works as follows:

1. The program prompts the user to enter a choice from 1, 2, or 3.
2. The program uses a switch case to execute the corresponding program based on the user's choice.
3. If the user enters an invalid choice, the program prints an error message.

Here is an example of how to use the combined program:

```
Enter your choice:
```

- ```
1. Print fruits
2. Print numbers
3. Print union
```

```
1
```

```
Apple, Mango, Banana, Lichy, Grapes
```