Solution Review: Design a Calculator

In this lesson, you will see the detailed solution review of the challenge given in the previous lesson.

We'll cover the following

- Solution
- Explanation
  - 1- add function
  - 2- subtract function
  - 3- multiply function
  - 4- divide function
  - test function

Solution

Press the **RUN** button and see the output!

```
#include <iostream>

using namespace std;

double add(double number1, double number2) {
  double result = number1 + number2;
  return result;
}

double subtract(double number1, double number2) {
  double result = number1 - number2;
  return result;
```

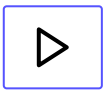
```
}

double multiply(double number1, double number2) {
  double result = number1 * number2;
  return result;
}

double divide(double number1, double number2) {
  double result = number1 / number2;
  return result;
}

double test(double number1, char operate, double number2) {
  double result;

  switch (operate) {
```




Explanation

1- `add` function#

The `add` function takes two values of type `double` in its input parameters, adds `number1` in `number2`, and returns the result of type `double` in the output.

```
double add (double number1, double number2);
```

2- `subtract` function#

The `subtract` function takes two values of type `double` in its input parameters, subtracts the `number2` from `number1`, and returns the result of type `double` in the output.

```
double subtract ( double number1 , double number2 ) ;
```

3- `multiply` function#

The `multiply` function takes two values of type `double` in its input parameters, multiplies the `number1` by `number2`, and returns the result of type `double` in the output.

```
double multiply ( double number1 , double number2 ) ;
```

4- `divide` function#

The `divide` function takes two values of type `double` in its input parameters, divides the `number1` by `number2`, and returns the result of type `double` in the output.

```
double divide ( double number1 , double number2 ) ;
```

`test` function#

The function `test` takes two values of type `double` and one value of type `char` in its input parameters.

- `number1` and `number2` takes the values of the operands.
- `operate` can take $+$, $-$, $*$, and $/$ in its value.

- If the value of `operate` is `+`, then it calls the `add` function and stores the output of the function in the `result`.
- If the value of `operate` is `-`, then it calls the `subtract` function and stores the output of the function in the `result`.
- If the value of `operate` is `*`, then it calls the `multiply` function and store the output of the function in the `result`.
- If the value of `operate` is `/`, then it calls the `divide` function and store the output of the function in the `result`.
- For any other value of `operate`, it should return **-1** in the output.

Let's wrap up this chapter by solving a quiz in the upcoming lesson.

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Challenge 3: Design a Calculator

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Quiz

Mark as Completed

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