## 1.Describe Vlookup function with various options available.

Conditional compilation in C allows you to include or exclude portions of code during compilation based on certain conditions. This is typically achieved using preprocessor directives, such as `#ifdef`, `#ifndef`, `#else`, `#endif`, and `#define`. It is useful for creating code that can be customized or adapted for different situations.

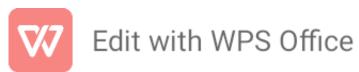
# Here's a simple example to illustrate conditional compilation:

```
""c
#include <stdio.h>
#define DEBUG // Uncomment or comment this line to enable/disable debug mode
Int main() {
    #ifdef DEBUG
    Printf("Debug mode is enabled.\n");
    #else
        Printf("Debug mode is disabled.\n");
    #endif
    Printf("This is a normal statement.\n");
    Return 0;
}
```

- In this example, the `#define DEBUG` directive defines a macro named DEBUG. When this line is present, the `#ifdef DEBUG` directive checks if DEBUG is defined. If it is defined, the code between `#ifdef` and `#else` is included during compilation; otherwise, it is excluded. In this case, "Debug mode is enabled." Will be printed when DEBUG is defined and "Debug mode is disabled." Will be printed when DEBUG is not defined.
- Conditional compilation is often used for creating builds with different features, handling platform-specific code, or including debugging statements that can be easily enabled or disabled.

#### 2.Apply HLOOKUP Function with range\_lookup FALSE or True for the above data.

- Certainly! Assuming the data is arranged in a table where the first row contains the headers, here's how you can use `HLOOKUP` for the given data.
- Assuming the data starts from cell A1 and ends at cell E12, and you want to find the value in the "Segment" column based on the header "DOB," here are examples for both



`range\_lookup` set to `FALSE` and `TRUE`:

```
### Using `HLOOKUP` with `range_lookup` set to `FALSE`:
```excel
=HLOOKUP("DOB", A1:E12, MATCH("Segment", A1:E1, 0), FALSE)
...
```

## **Explanation**:

- The `MATCH("Segment", A1:E1, 0)` part finds the column number where "Segment" is located.
- `HLOOKUP("DOB", A1:E12, ..., FALSE)` then looks for "DOB" in the first row and returns the corresponding value from the same column as "Segment."

```
### Using `HLOOKUP` with `range_lookup` set to `TRUE`:
```excel
=HLOOKUP("DOB", A1:E12, MATCH("Segment", A1:E1, 0), TRUE)
```

### **Explanation**:

- The `MATCH("Segment", A1:E1, 0)` part finds the column number where "Segment" is located.
- `HLOOKUP("DOB", A1:E12, ..., TRUE)` then looks for the closest match less than or equal to "DOB" in the first row and returns the corresponding value from the same column as "Segment."
  - Choose between `FALSE` and `TRUE` based on your specific requirements for matching exact values or finding approximate matches.

