

This Python code implements an "email slicer" program that takes an email address as input, parses it, and then extracts and displays the username, domain, and extension of the email address. Here's a step-by-step explanation of the code:-

1) Define the **main** function:-

- The code starts by defining the **main** function. This function will handle the core logic of the program.

2) Print a welcome message:-

```
def main():  
    print(" Welcome to the email slicer ")  
    print("")
```

This code prints a welcome message to the user, indicating that they are using an email slicer.

3) Prompt the user for their email address:-

```
email_input = input("Input your email address: ")
```

The program uses the **input** function to prompt the user to input their email address and stores the input in the **email\_input** variable.

4) Split the email address into parts:

```
(username, domain) = email_input.split("@")  
(domain, extension) = domain.split(".")
```

- The code uses the **split** method to break the email address into three parts: **username**, **domain**, and **extension**.
- First, it splits the email address at the "@" symbol to separate the **username** and the **domain**.
- Then, it splits the **domain** part at the "." symbol to separate the **domain** and **extension**.

#### 5) Print the parsed components:-

```
print("Username : ", username)
print("Domain : ", domain)
print("Extension: ", extension)
```

The program prints out the parsed components of the email address: the **username**, **domain**, and **extension**.

#### 6) Start an infinite loop:-

```
while True:
    main()
```

The code enters an infinite loop that repeatedly calls the **main** function. This allows the user to continue entering email addresses and getting them sliced without having to restart the program each time.

So, when you run this program, it will keep asking you to input an email address, and it will then split and display the username, domain, and extension of that email address. The loop allows you to keep using the program for multiple email addresses without needing to relaunch it each time.