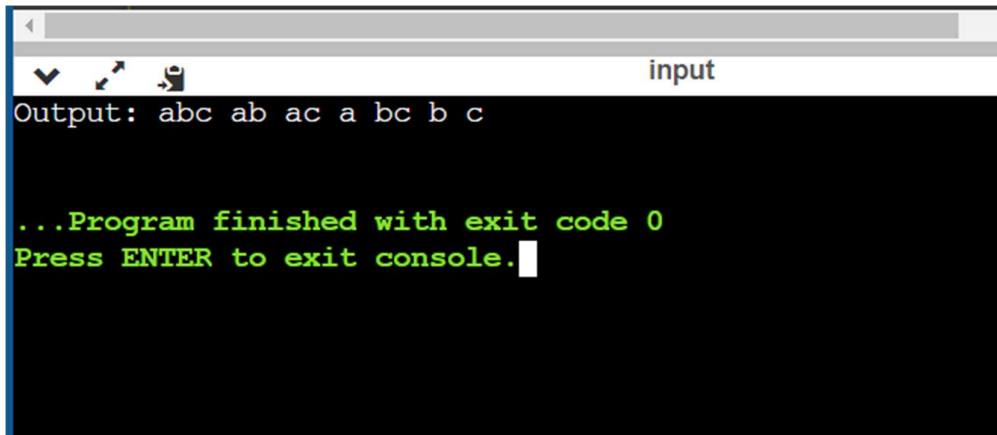


Problem – 4 Given a string, find all the possible subsequences of the string.

```
def find_subsequences(s, index, current_subsequence, result):  
    if index == len(s):  
        if current_subsequence:  
            result.append(current_subsequence)  
        return  
  
    find_subsequences(s, index + 1, current_subsequence + s[index], result)  
    find_subsequences(s, index + 1, current_subsequence, result)  
  
def all_subsequences(s):  
    result = []  
    find_subsequences(s, 0, "", result)  
    return result  
  
string = "abc"  
subsequences = all_subsequences(string)  
print("Output:", " ".join(subsequences))
```

A screenshot of a terminal window with a dark background. The title bar at the top says "input". The terminal shows the output of the program: "Output: abc ab ac a bc b c". Below this, it says "...Program finished with exit code 0" and "Press ENTER to exit console." with a white cursor at the end of the line.

```
input  
Output: abc ab ac a bc b c  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```