

String Problem 7

Write a program to find the first position of a given character in a string

- ask the user to enter a string
- ask the user to enter a single character
- report the position that the character first appears in the string
- if the character does not appear, report that it does not appear

Algorithm 1 – built in function

```
1 word = input("Enter a word: ")
2 char = input("Enter the character to find: ")
3 pos = word.find(char)
4 if pos == -1:
5     print("Does not appear")
6 else:
7     print(pos + 1)
```

Algorithm 2 – for loop

```
1 word = input("Enter a word: ")
2 char = input("Enter the character to find: ")
3 pos = -1
4 foundIt = False
5 for i in range(0, len(word)):
6     if word[i] == char:
7         if foundIt == False:
8             foundIt = True
9             pos = i + 1
10 if pos == -1:
11     print("Not found")
12 else:
13     print(pos)
```

Algorithm 3 – while loop

```
1 word = input("Enter a word: ")
2 char = input("Enter the character to find: ")
3 pos = -1
4 foundIt = False
5 i = 0
6 while foundIt == False and i < len(word):
7     if word[i] == char:
8         foundIt = True
9         pos = i + 1
10    i = i + 1
11 if pos == -1:
12     print("Not found")
13 else:
14     print(pos)
```