

# Question 2:

```
Public class Question2 {  
    String text1 = "gears of war";  
    String text2 = "history of warriors";
```

```
    Public static void main (String[] args) {  
        Question2 assignment = new Question2();
```

```
        String longestSubstring = "";
```

```
        int maxLength = 0;
```

```
        for (int i = 0; i < assignment.text1.length(); i++) {
```

```
            for (int j = 0; j < assignment.text2.length(); j++) {
```

```
                int currentLength = 0;
```

```
                While ((i + currentLength < assignment.text1.length()) &&  
                    (j + currentLength < assignment.text2.length()) &&  
                    (assignment.text1.charAt(i + currentLength) ==  
                     assignment.text2.charAt(j + currentLength))) {
```

```
                    currentLength++;
```

```
                }
```

```
                if (currentLength > maxLength) {
```

```
                    maxLength = currentLength;
```

```
                    longestSubstring = assignment.text1.substring(i, i + currentLength);
```

```
                }
```

```
            }
```

```
        }
```

```
        if (maxLength > 0) {
```

```
            System.out.println("The longest substring: \"" + longestSubstring + "\"");
```

```
        } else {
```

```
            System.out.println("No common substring found.");
```

```
        }
```

```
    }
```

```
}
```