Q1. Explain the difference between greedy and non-greedy syntax with visual terms in as few words as possible. What is the bare minimum effort required to transform a greedy pattern into a non-greedy one? What characters or characters can you introduce or change?

**Ans:** So, the difference between the greedy and the non-greedy match is the following: The greedy match will try to match as many repetitions of the quantified pattern as possible. The non-greedy match will try to match as few repetitions of the quantified pattern as possible. To make the quantifier non-greedy you simply follow it with a '?' the first 3 characters and then the following 'ab' is matched. greedy by appending a '?' symbol to them: \*? +?, ??, {n,m}?, and {n,}.

Q2. When exactly does greedy versus non-greedy make a difference?  What if you are looking for a non-greedy match but the only one available is greedy?

**Ans:** You can see that the greedy version finds one match and is done with it. The non-greedy version finds 25 matches which leads to far more processing and memory overhead. So what happens if you use the re.search() method that returns only the first match rather than the regex.

Q3. In a simple match of a string, which looks only for one match and does not do any replacement, is the use of a nontagged group likely to make any practical difference?

**Ans:** The Regex.Replace method will remove the regex match from the string and insert the replacement string (greater than symbol and a space). Since the match does not include any characters, nothing is deleted. However, the match does include a starting position, and the replacement string is inserted there, just like we want it.

Q4. Describe a scenario in which using a nontagged category would have a significant impact on the program's outcomes.

**Ans:** The impact, or programme effect, refers to a change in the target population that has been brought about by the programme – that is, a change that would not have occurred if the programme had not happened (1).

Q6. In standard expressions, what is the difference between positive look-ahead and negative look-ahead?

**Ans:** Positive lookahead: (? = «pattern») matches if pattern matches what comes after the current location in the input string. Negative lookahead: (?! «pattern») matches if pattern does not match what comes after the current location in the input string.

Q7. Does a scanner object have to be named scanner?

**Ans:** To create an object of Scanner class, we usually pass the predefined object System.in, which represents the standard input stream. We may pass an object of class File if we want to read input from a file.