

Answers:

1. Because we have different data in our world so we need to organize it somehow, like programming languages do
2. High programming languages is already good so we just don't need higher ones. But they can exist. Abstractions, like languages, help us to simplify communication between machines and people.
3. We use variables to store some data we need to use more than one time or later in program. Sometimes it helps us to reduce code length or explain what we are storing in it. Like if you need to use some id for code, it's easier to store it in variable with understanding name
4. Immutable string means that string can't be changed and you can interact with it. It works like that because support of changing string is too complicated, creates problems and it's bad for optimization

5.

1. True
2. False
3. True
4. False
5. False

6.

1. `new_s = 'popravni' + s`
2. `new_s = s[10:]`
3. `new_s = 'as je vanredni is'`
4. `new_s = s[::-2]`
5. `new_s = s[:-3]`
6. `half_len = len(s) / 2`
`new_s = s[half_len - 1 : half_len + 1]`
7. `half_len = len(s) / 2`
`new_s = s[1] + s[half_len - 1 : half_len + 1] + s[-1]`

7.

1. Lists are used for storing multiple data in of different types. They are also good in use with "for" cycle
2. `len(lista[3:]) = 3`
3. `len(lista[1::2]) = 2`
4. `print(a[1:-1]) → [2, 5, 7]`
5.
 1. Machine code – "language" of computer, they communicate on it. It has only 0 and 1 in it
 2. Programming language is like translator – it takes our code (mostly in english) and translates it to machine like ones and zeros.
 3. Interpreter – script(or program) that reads code by each line and converts it into lower level of code
 4. Compiler just takes all code in file and converts it into lower level of code
 5. Fundamental data types – data types that are integrated in language (int, str, float, etc.)
 6. Classes – another type of data that can be used, for example, in creating new data types.
 7. Function – set of actions, helps to organize code, for example, in situations, where we have same code repeated 2+ times.
 8. Variable can be named as data keeper – it stores some information in itself

9. Expression – is an interpretation of a value that we can store in variable or use it in program
10. Statements – is already assigned variable, for example, that can be used in program