

Question set 01

Which of the following SW examples are generic products:

- MS Word.
- IS MUNI.
- MS Windows.

Which of the following lifecycles are suitable for large-scope information systems:

- Waterfall.
- Prototyping.
- Incremental.

Testing plan shall be created during the following phase:

- Analysis.
- Specification.
- Coding.

Which of the following lifecycles apply development based on general requirements:

- Waterfall.
- Incremental.
- Researcher.

Spiral lifecycle is:

- Iterative.
- Incremental.
- Linear.

When focusing on the composition of application, it is true that:

- Part of code dealing with user inputs is larger than the part dealing with outputs.
- Part of code dealing with output is larger than the part dealing with user inputs.
- Both parts are approximately the same.

When focusing on the typical programmers' activities, which activity consumes the highest amount of time?

- Reading documentation.
- Writing code.
- Writing documentation.

During SW maintenance, which activity consumes the highest amount of time:

- Emergency hotfixing.
- Routine debugging.
- On-demand modifications.

The total cost of SW maintenance during its whole lifetime is:

- less than 10 % of the cost for SW development.
- can be higher than the actual cost for SW development.
- depends on the duration of contract for maintenance.

Choose correct statement:

- The later the lifecycle phase an error is detected, the higher is the cost to fix it.
- The later the lifecycle phase an error is detected, the cheaper it is to fix it.
- From cost perspective, it does not matter in which lifecycle phase we detect an error.

Lehman's law of continuous change states that:

- System used in real environment is continuously changing but it is still cheaper to re-structure the system than to completely replace it.
- System used in real environment is continuously changing, until it becomes cheaper to re-structure the system, or to completely replace it by a newer version.
- System used in a real environment does not change to such extent that it would be needed to re-structure it, or try to replace it.

Lehman's law of increasing complexity states that:

- During evolutionary changes, the program structure is more or less the same, as well as its internal complexity. It is not necessary to invest substantially to deal with changes in complexity.
- During evolutionary changes, the programs becomes increasingly less structured and internal complexity becomes higher. However, removing this complexity is not causing additional effort.
- During evolutionary changes, the programs becomes increasingly less structured and internal complexity becomes higher. Removing increased complexity requires additional effort.

Lehman's law of self-regulation states that:

- The pace of change of global attributes may appear random over time.
- The pace of change of global attributes can be statistically described.
- The pace of change of global attributes is random over time.

Lehman law of invariant work rate states that:

- Investing more money into development correlates with actual pace of development.
- Investing more money into development will not speed-up the development.
- From long-term perspective, the work rate of developers does not significantly change.

Brook's law states that:

- adding new team member to a delayed project will usually help to meet the deadline.
- adding new team member to a delayed project will usually cause an increased delay.
- removing a team member from a delayed project will usually help to meet the deadline.

As the amount of code grows bigger, the programmers' productivity:

- is increasing.
- is decreasing.

- remains the same.