Unit 3 - Lesson 2: Best Practices in Programming

7. Pre-reading: Study the following keywords:

1.**Planning:** In programming, it involves understanding the problem and outlining the program's functions.

2.**Coding:** The act of writing the instructions that a computer follows to perform tasks.

3.**Variables:** Elements in programming used to store data, such as numbers or text.

4.**Functions:** Blocks of code in a program designed to perform a specific task.

5.**Testing:** The process of running a program to identify any errors or bugs in the code.

6.**Refactoring:** Modifying existing computer code to improve its structure, performance, or readability without changing its functionality.

Best Practices in Programming

Programming is like building with blocks. To be good at it, you need to follow some important steps.

First, understand what you want to build. This means knowing the problem well. Think about what your program should do. Planning is like drawing a map before you start a journey.

When you start coding, write your code clearly. Use names that make sense for your variables and functions. This is like labeling your blocks so you know what each one does.

Testing your code is like checking your blocks to make sure they fit right. Do this often to find any mistakes early.

It's also good to work with friends. Share your code with them. They can give you new ideas and help you see what you might have missed.

As you grow in coding, keep learning. Technology changes fast, so there's always something new to learn. This is like getting new blocks to build even better things.

Finally, go back to your old code sometimes. See if you can make it better. This is called refactoring. It's like improving your block buildings as you learn more about building.

Remember, good programming is about planning, writing clear code, testing, learning, and improving. Keep practicing these steps, and you'll become a great programmer!

9- Based on the previous reading, complete the fill-in-the-blank activity. For each sentence, fill in the blank with the word or phrase that best fits, based on what you have read.

1.Programming is like building with _____.
2.To start, you need to understand the _____ you want to solve.
3.Planning your code is like drawing a _____ before a journey.
4.Write your code clearly, using sensible names for _____ and functions.
5. _____ your code often helps to find mistakes early.
6.Sharing your code with others can give you new _____ and insights.
7.Keeping up with _____ in technology means always learning new
things.
8.Going back to improve your old code is known as _____.

10- Activity: "Building Blocks of Programming"

Instructions:

1.You will be given a series of sentences, each representing a key concept
from the reading.
2.Your task is to match each sentence with the corresponding programming best practice.
3.Below are the sentences and a list of best practices. Draw a line or write
the number of the sentence next to the correct practice.

Sentences:

A. Know what your program should do. ____

B. Use clear names for your variables and functions. _____

C. Check your code to find mistakes early. _____

D. Work with others to get new ideas. _____

E. Continuously learn new things in programming. ____

F. Improve your existing code. ____

Best Practices:

1. Testing your code

2. Understanding the problem

3. Writing clear code

4. Collaborative coding

5. Continuous learning

6. Refactoring