1. Why loops are necessary in Programming Language?
2. What is the purpose of pass keyword?
3. What is the difference between break and continue?
4. What is the difference between while loop and for loop?

Loops are essential in programming because they help automate repetitive tasks, reducing redundancy and improving efficiency. Instead of writing multiple lines of code to perform the same action repeatedly, loops allow us to execute a block of code multiple times until a condition is met.

Key Benefits of Loops:

Reduces Code Repetition

Enhances Code Efficiency

Improves Readability & Maintainability

Handles Large Data Sets

Used in Iterative Processing

PASS:

The pass keyword is used as a placeholder for future code. It allows the program to run without errors when an empty code block is required.

Use Cases of pass:

def future_function():

   pass

BREAK	CONTINUE
Exits the loop completely	Skips the current iteration and continues the loop

When a certain condition is met and you want to stop execution	When you want to skip an iteration but continue looping

WHILE	FOR
Used when the number of iterations is unknown	Used when the number of iterations is known or iterable is available
Runs as long as a condition is True	Iterates over a sequence
When looping depends on a condition	When iterating over a collection or sequence