

Q1. What is the difference between block-based and text-based programming languages?

A1. Block-based vs Text-based Programming Languages

Block-based Programming

- Uses **drag-and-drop blocks** that fit together like puzzle pieces.
- Each block represents a command (like “move forward” or “repeat”).
- Example: **Scratch** or **Blockly**.
- **Good for beginners** because you don’t have to worry about spelling or syntax errors.

Text-based Programming

- Uses **typed code** written with words and symbols.
- You must follow the exact rules (syntax) of the language.
- Example: **Python**, **C**, or **C++**.
- **More powerful and flexible**, requires practice to avoid errors.

Q2. What is an IDE?

A2. **IDE** stands for **Integrated Development Environment**. It is a **special software tool** that programmers use to **write, test, and fix code** all in one place.

Q3. What’s are the components of an IDE?

A3. The main components of an **Integrated Development Environment** are:

- **Code editor:** Where you type your program.
- **Debugger:** Helps find and fix mistakes (bugs).
- **Compiler/Interpreter:** Translates your code into a language the computer understands.
- **Extra tools:** Like auto-complete, suggestions, and project organizers.

Q4. List some of the common output errors in python.

A4. Common errors in python print statemnt are:

Code	Error
<code>rint("Hello")</code>	→ print is spelt incorrectly
<code>print "Hello"</code>	→ missing brackets
<code>print(Hello)</code>	→ missing double quotation marks
<code>print ("Hello)</code>	→ missing one quotation mark
<code>PRINT("Hello")</code>	→ print should be lowercase
<code>output("Hello")</code>	→ output should be print

Q5. Write a Python program to output a list Of facts about yourself.

```
print("My Name is Lokesh")
```

```
print("Grade 6 PHEONEX")
```

```
print("School: NIHOC The International School")
```

```
print("I like to play football")
```