

# **Task 3 — Official Submission**

**Student Name: Iqra waqas**

---

## **PART A — Research Questions**

### **1. What new improvements were introduced in Gemini 3.0?**

Gemini 3.0 introduced better reasoning a new Deep Think mode, and improved instruction following It also comes with a 1 million token context window so it can handle long documents and big code files easily. Its multimodal features are upgraded too making it better at understanding text, images, videos, and spatial information.

### **2. How does Gemini 3.0 improve coding & automation workflows?**

Gemini 3.0 lets us do "vibe coding" where the user just writes a simple description and the AI generates the whole code. Its agentic system can automatically handle coding tasks testing, debugging and command execution. Developer tools like the CLI and Antigravity make the workflow very fast and efficient.

### **3. How does Gemini 3.0 improve multimodal understanding?**

Gemini 3.0 can deeply analyze text, images, videos, audio, and spatial data all at the same time. Its visual reasoning and video analysis skills accurately understand complex scenes documents, and long videos. The spatial reasoning is also much better which helps the AI interpret real world objects and movements more effectively.

### **4. Name any two developer tools introduced with Gemini 3.0.**

The two main tools are Google Antigravity, which is an agent based development environment where the AI plans and executes tasks automatically. The second is the Gemini CLI which is a command line tool that lets developers do coding, debugging, and automation directly from their terminal.

---

## **★ PART B — Practical Task**

```
npm install @google/gemini-cli@0.17.0
gemini 3 is now available.
Join the waitlist at https://goo.gle/enable-preview-features

tips for getting started:
Ask questions, edit files, or run commands.
Be specific for the best results.
/help for more information.

model

gemini CLI update available! 0.16.0 → 0.17.0
Installed with npm. Attempting to automatically update now...

select Model
gemini 3 is now available.
To use Gemini 3, enable "Preview features" in /settings.
Learn more at https://goo.gle/enable-preview-features

1. Auto
   Let the system choose the best model for your task.
2. Pro (gemini-2.5-pro)
   For complex tasks that require deep reasoning and creativity
3. Flash (gemini-2.5-flash)
   For tasks that need a balance of speed and reasoning
4. Flash-Lite (gemini-2.5-flash-lite)
   For simple tasks that need to be done quickly

To use a specific Gemini model on startup, use the --model flag.

Press Esc to close)                                     Activate Windows
Go to Settings to activate Windows.
```

```
Windows PowerShell

Tips for getting started:
1. Ask questions, edit files, or run commands.
2. Be specific for the best results.
3. /help for more information.

Gemini CLI update available! 0.15.4 → 0.16.0
Installed with npm. Attempting to automatically update now...

Update successful! The new version will be used on your next run.

> /model gemini-3.5-flash

Using: 1 GEMINI.md file
> █ Type your message or @path/to/file
~\Desktop\gemini                                         no sandbox (see /docs)                                     Activate Windows
Go to Settings to activate Windows. aut
```