

**Sufyan Ajmal**

**SU92-BSAIM-F24-017**

**BSAI-3A**

**AI-LAB**

1. **Dynamic calculator Explain the code, how and why:**

**Explanation:**

* The program first prints “Dynamic Calculator” so the user knows what it does.
* It asks the user to enter a mathematical expression (for example: 2+3\*5).
* The function eval () is used to calculate the result of that expression.
  + Example: eval ("2+3\*5") → 17.
* The try-except block is used to handle errors:
  + If the expression is correct, it shows the result.
  + If the expression is wrong, it shows “Invalid Expression” instead of crashing.

**Why:**  
This makes the calculator *dynamic*, because the user can enter any mathematical expression and get an instant result.



1. **To-Do list (Dynamic)**

**Explanation:**

* An empty list Todo = [] is created to store tasks.
* The program runs in a loop (while True) until the user types "exit".
* User options:
  1. If the user types "exit", the loop stops and the program ends.
  2. If the user types "show", it prints the complete To-Do list.
  3. Otherwise, the input is saved as a new task inside the list using append ().

**Why:**This program allows the user to add tasks one by one and see the list whenever they want. It is *dynamic* because tasks are not fixed — the user decides them while the program is running.

