AI Lab 09
Section A

Task 01:
Implement a simple text-based chatbot that can engage in a conversation with a user. The chatbot should understand and respond to user input with pre-defined responses.

- User: "Hello"
  - Chatbot: "Hi there! How can I help you today?"
- User: "What's the traffic update in Lahore right now?"
  - Chatbot: "I'm sorry, I don't have access to real-time map information."
- User: "Tell me a joke"
  - Chatbot should tell a joke.
- User: "Tell me a story: "
  - Chatbot should tell a short story

Task 02:
Find the shortest path from a start point to a goal point on a grid, avoiding obstacles using best searching algorithm in this scenario.
Lets take a grid like this: where S is start, G is goal and X is obstacle and . is for open space,

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['S', '.', '.', 'X', 'X']
['.', 'X', '.', '.',  '.']
['.', 'X', 'X', '.', 'X']
['.', '.',  '.',  '.',  '.']
['X', '.', 'X', 'X', 'G']
```