MOCK LAB EXAM - SECTION A

INSTRUCTIONS

1. This mock lab exam consists of 2 sections:
    a. Section A assesses your ability to create a basic stationery store page using HTML, CSS, and JavaScript.
    b. Section B tests your knowledge on Python.
2. You have 90 minutes to complete this lab.

Section A - stationery store page using HTML, CSS and JavaScript

HTML

1. Create a main HTML file named index.html.
2. Use semantic HTML5 elements like <header>, <nav>, <section>, <footer> etc.
3. Include a navigation menu with links to Home, Catalog, About, and Contact sections.
4. Design a homepage section with
    a. a welcome message,
    b. a brief introduction to the store,
    c. a call-to-action button (a prominently visible button). Its functionality is explained in the JS section.
5. Create a Catalog section displaying at least three stationery items with descriptions, and prices.
6. Include an About section with information about the stationery store, its history, and mission.
7. Add a Contact section with a form including fields for Name, Email, and Message.

CSS

1. Create a CSS file named style.css.
2. Implement a responsive design using CSS Grid or Flexbox.
3. Style the navigation menu to be horizontally aligned and responsive.
4. Design a visually appealing layout for the homepage, catalog items, about section, and contact form.
5. Use appropriate colors, fonts, and spacing to enhance the visual presentation.

JavaScript

1. Create a JavaScript file named script.js.
2. Add functionality to the call-to-action button to scroll smoothly to the Catalog section.
3. Validate the contact form fields for Name and Email to ensure they are not empty.
4. Implement a basic form submission function to handle form data, and perform form validation.

Section B - Python

Question 1

Using loops, create a python program to print the below pattern on screen:

```
********
 ******
  ****
   **
   **
  ****
 ******
********
```

In the output, ask the user to provide input for length of stars in top row (even number between 8 and 20, both included). Based on the input, generate the design as shown in the figure.

Question 2

Write a Python program that takes 10 words(strings) from the user and a choice “ascending/descending”. Based on the choice, display the strings in that order.
In the same question, ask the user to add another string. Update and display the order with new string and end the program