### Software Engineering Lab Task 2

4-12-2024

Eshwar Deshmukh Chavan

HU22CSEN0100999

write any program is goggle colab using hard coding variables, keyboard input, read from a file single input and read from a file multiple set of inputs and save all the versions, debug and fix any errors, push all the versions into your git hub account.

### Steps:

### 1. Hardcoding Variables:

- Demonstrates the use of predefined values.
- Shows basic variable assignment and printing.

```
# Hardcoding Variables

a = 1

b = 2

print(f"Hardcoded values: a = {a}, b = {b}")

Hardcoded values: a = 1, b = 2
```

## 2. Keyboard Input:

- Utilizes Python's input() function to accept user data.
- Converts input to the appropriate data type (e.g., integer).

```
# Keyboard Input

name = input("Enter your name: ")

age = int(input("Enter your age: "))

print(f"Name: {name}, Age: {age}")

Enter your name: Eshwar Deshmukh Chavan
Enter your age: 19

Name: Eshwar Deshmukh Chavan, Age: 19
```

## 3. Read From File (Single Input):

- Reads a single input from a file.
- Handles file not found errors using try-except.

```
+ Code + Text
                            □ X
Files
                                             # Read From File (Single Input)
G
                 Ø
            A
                                              file_path = 'single_input.txt'
    sample_data
                                                 with open(file_path, 'r') as file:
                                                     single_input = file.read()
   single_input.txt
                                                     print(f"Single input from file: {single_input}")
                                              except FileNotFoundError:
                                                 print(f"Error: The file {file_path} does not exist.")
                                         → Single input from file: Name: Eshwar Deshmukh Chavan
                                             Roll no: HU22CSEN0100999
                                             course: Software engineering
```

### 4. Read From File (Multiple Inputs):

- Reads multiple inputs from a file.
- Processes each line of the file.
- · Handles file not found errors using try-except.

```
+ Code + Text
                                 X
Files
       G
 F
                                              file_path = 'multiple_inputs.txt'
                                              try:
sample_data
                                                  with open(file_path, 'r') as file:
   multiple_inputs.txt
                                                      multiple_inputs = file.readlines()
                                                      for line in multiple_inputs:
   single_input.txt
                                                           print(f"Input from file: {line.strip()}")
                                               except FileNotFoundError:
                                                  print(f"Error: The file {file_path} does not exist.")
                                          → Input from file: Software Engineering Lab Task 2
                                              Input from file: Name: Eshwar Deshmukh Chavan
                                              Input from file: Roll no: HU22CSEN0100999
                                              Input from file: course: Software engineering
                                              Input from file: lab task 4-12-2024
```

# 5. Save All Versions:

- Each version of the program is saved in different cells.
- Ensures clarity and separation of different tasks.

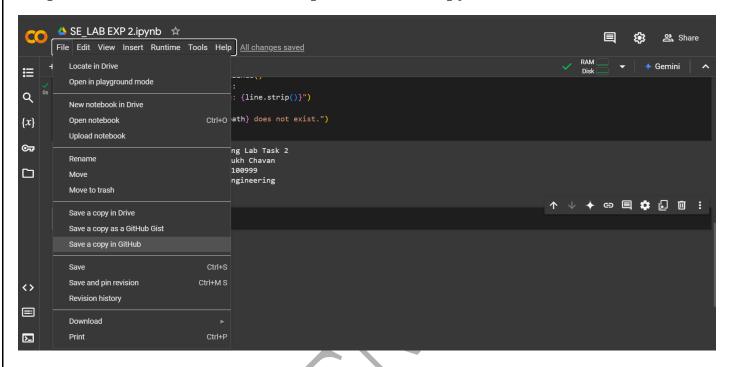
## 6. Debug and Fix Errors:

- Includes error handling for missing files.
- Ensures robustness by catching and reporting errors.

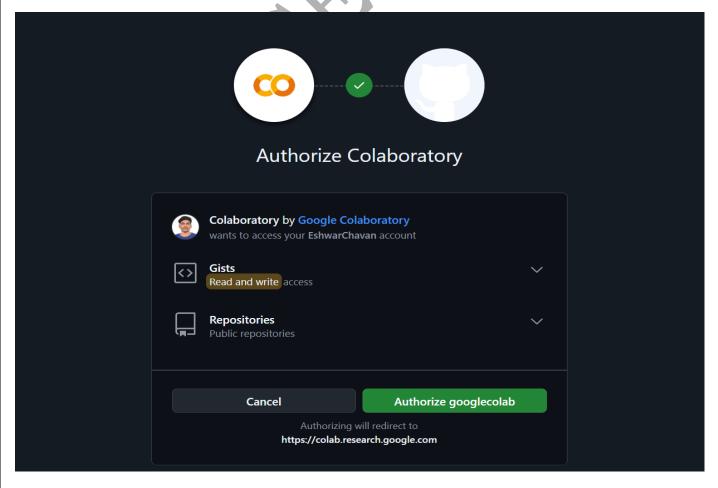
#### 7. Push Versions to GitHub:

- Uses git commands within Colab to push changes.
- Ensures version control and collaboration.

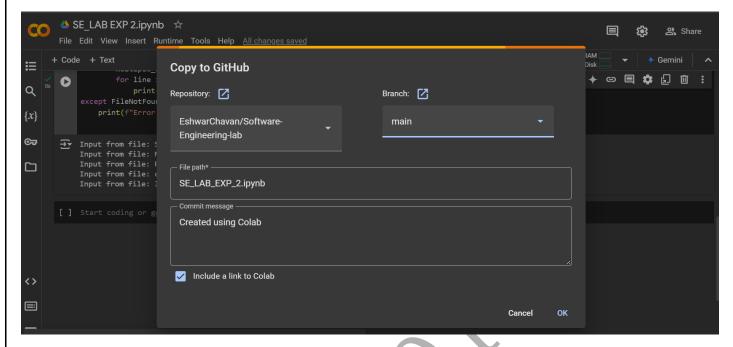
Step 1: Click on file and select option save a copy in GitHub



Step 2: Authorize Colaboratory



## Step 3:Click on ok for copying to GitHub



## Step 4: Pushed into GitHub

