Assignment 1:

Ensure the script checks if a specific file (e.g., myfile.txt) exists in the current directory. If it exists, print “File exists”, otherwise print “File not found”.

Sol:

```
#!/bin/bash

# Define the filename

filename="myfile.txt"


# Check if the file exists

if [ -e "$filename" ]; then

   echo "File exists"

else

   echo "File not found"

fi
```

Explanation:

1. **Shebang (`#!/bin/bash`)**:
    - This line specifies that the script should be executed using the Bash shell.
2. **Filename Definition**:
    - The `filename` variable is set to the name of the file you want to check, in this case, `myfile.txt`.
3. **File Existence Check**:
    - The `-e` flag in the `if` statement checks if the file exists (whether it's a regular file or a directory).
    - `"$filename"` references the variable containing the file name.
4. **Conditional Output**:
    - If the file exists (`if [ -e "$filename" ];`), the script prints "File exists".
    - If the file does not exist (`else`), the script prints "File not found".

Extending the Script

For example, to check if the file is a regular file and is readable, you can modify the script as follows:

```
#!/bin/bash

# Define the filename

filename="myfile.txt"

# Check if the file exists

if [ -e "$filename" ]; then

    # Check if it is a regular file

    if [ -f "$filename" ]; then

        # Check if the file is readable

        if [ -r "$filename" ]; then

            echo "File exists and is readable"

        else

            echo "File exists but is not readable"

        fi

    else

        echo "File exists but is not a regular file"

    fi

else

    echo "File not found"

fi
```