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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".

Code:

```bash
#!/bin/bash
read -p "enter  the file name:" filename

if [ -e "$filename" ]; then
    echo "File exists"
else
    echo "File not found"
fi
```

Output:

- **Case1:**

```
rps@rps:~/Music$ nano assignment1.sh
rps@rps:~/Music$ chmod 777 assignment1.sh
rps@rps:~/Music$ ./assignment1.sh
enter  the file name:myfile.txt
File not found
```

- **Case2:**

```
rps@rps:~/Music$ nano assignment1.sh
rps@rps:~/Music$ chmod 777 assignment1.sh
rps@rps:~/Music$ ./assignment1.sh
enter  the file name:array.sh
File exists
```

Assignment 2: Write a script that reads numbers from the user until they enter '0'. The script should also print whether each number is odd or even.

Code:

```bash
#!/bin/bash

while true;
 do
    read -p "Enter a number (0 to exit): " number
    if [ "$number" -eq 0 ]; then
        echo "Exiting..."
        break
    fi

    if [ $((number % 2)) -eq 0 ]; then
        echo "$number is even"
     else
        echo "$number is odd"
     fi
done
```

Output:

```
rps@rps:~/Music$ nano assignment2.sh
rps@rps:~/Music$ chmod 777 assignment2.sh
rps@rps:~/Music$ ./assignment2.sh
Enter a number (0 to exit): 1
1 is odd
Enter a number (0 to exit): 2
2 is even
Enter a number (0 to exit): 3
3 is odd
Enter a number (0 to exit): 4
4 is even
Enter a number (0 to exit): 5
5 is odd
Enter a number (0 to exit): 0
Exiting...
```

Assignment 3: Create a function that takes a filename as an argument and prints the number of lines in the file. Call this function from your script with different filenames.

Code:

```
count_lines() {
    local filename="$1"
    local line_count=$(wc -l < "$filename")
    echo "Number of lines in $filename: $line_count"
}

read -p "Enter the filename: " filename
count_lines "$filename"
```

Output:

```
rps@rps:~/Music$ nano assignment3.sh
rps@rps:~/Music$ chmod 777 assignment3.sh
rps@rps:~/Music$ ./assignment3.sh
Enter the filename: assignment1.sh
Number of lines in assignment1.sh: 8
```