Assignment 7

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SECTION-3A

ROLL NO.-59

USN- ENG24CY0161

1. What is a bash shell script? Give one example.

A **bash shell script** is a text file that contains a series of commands that can be executed by the Linux shell automatically.

Example:

#!/bin/bash

echo "This is my first shell script!"

---

2. Write a simple shell script to print "Hello World".

#!/bin/bash

echo "Hello World"

 Save as hello.sh and run:

bash hello.sh

---

3. What is the purpose of comments (#) in a shell script?

Comments help explain the code and are **ignored by the shell** during execution.

Example:

This line prints a message

echo "Hello"

---

4. How do you declare variables (int, float, double, string, Boolean, char) in a shell script?

Bash treats all variables as **strings**, but they can be used as numbers too.

```
int=10

float=2.5

double=5.55

string="Hello"

boolean=true

char='A'
```

---

5. Write a shell script to display the current date and time.

```
#!/bin/bash

echo "Current Date and Time: $(date)"
```

---

6. Difference between a constant and a variable in bash script.

Term	Description	Example
Variable	Value can change	name="Komal"
Constant	Value cannot change (readonly)	readonly pi=3.14

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7. Script to read two integers and compute their sum.

```
#!/bin/bash

read -p "Enter first number: " a

read -p "Enter second number: " b

sum=$((a + b))

echo "Sum = $sum"
```

---

8. What is the use of source command in shell scripting?

source runs a script in the **current shell** instead of starting a new one.
Example:

```
source file.sh
```

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9. How can you debug a shell script?

Two methods:

1. Run with -x option → bash -x script.sh

2. Add set -x inside the script to trace commands.

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10. Write a bash script to create and delete a file.

#!/bin/bash

touch test.txt

echo "File created"

rm test.txt

echo "File deleted"