1. What is a bash shell script? Give one example.
A bash shell script is a text file containing a series of commands written in the Bash shell scripting language, which the shell executes sequentially. Example: A script that prints "Hello World".

2.Write a simple shell script to print "Hello World".
```
#!/bin/bash
echo "Hello World"
```

3. What is the purpose of comments in a shell script?
Comments are used to explain and annotate code, making it easier to understand and maintain. They are ignored during script execution.

4.How do you declare variables int, float, double, string, Boolean, and char in a shell script?
Bash does not have explicit types; variables are by default strings. To represent different types:
•int: num=10
•float/double: Bash doesn't support floating points natively (use bc for calculations)
•string: str="Hello"
•Boolean: use 0 or 1 or true/false strings
•char: just a single-character string, e.g. c="A"

5.Write a shell script to display the current date and time of the system.
```
#!/bin/bash
date
```

6. Explain the difference between a constant and a variable in bash script.
A variable's value can change during execution, while a constant's value remains fixed. Bash does not natively support constants but readonly variables can be used.

7.Write a shell script to read two integer numbers from the user and compute the sum of both numbers.
```
#!/bin/bash
echo "Enter first number:"
read num1
echo "Enter second number:"
read num2
sum=$((num1 + num2))
echo "Sum is: $sum"
```

8. What is the use of source command in shell scripting?
The source command executes a script in the current shell session, allowing changes like variable assignments to persist.

9.How can you debug a shell script? Give two methods.
•Use bash -x script.sh to run the script with debug output.
•Insert set -x and set +x in the script to enable/disable debugging at points.

10.Write a bash script to create and delete a file.
```
#!/bin/bash
touch myfile.txt
echo "File created"
rm myfile.txt
echo "File deleted"
```