

1. Write a script with few argument, the display all **special variables**.

Ans.

```
display_special_variables() {  
    echo "Script name (\$0): $0"  
    echo "Number of arguments (\$#): $#"  
    echo "All arguments (\$*): $*"  
    echo "All arguments (separately, \$@): $@"  
    echo "Process ID of the script (\$\$): $$"  
    echo "Last command's exit status (\$?): $?"  
    echo "Current shell options (\$-): $-"  
    echo "Process ID of the last background command (\$!): $!"  
    echo "Current line number (\$LINENO): $LINENO"  
}  
  
display_special_variables  
  
if [ $# -gt 0 ]; then  
    echo "Individual arguments:"  
    for arg in "$@"; do  
        echo "$arg"  
    done  
else  
    echo "No arguments were provided."  
fi
```

2. Write a shell script for if else, if ..elif ... else

```
if...else
```

```
echo "Enter a number:"
```

```
read number
```

```
if [ $number -gt 0 ]; then
```

```
    echo "The number is positive."
```

```
else
```

```
    echo "The number is not positive."
```

```
fi
```

```
#!/bin/bash
```

```
read -p "Enter a number: " num
```

```
if [ $num -gt 0 ]; then
```

```
    echo "The number is positive."
```

```
elif [ $num -lt 0 ]; then
```

```
    echo "The number is negative."
```

```
else
```

```
    echo "The number is zero."
```

```
Fi
```

3. Write a shell script for until loop

```
count=0
until [ $count -gt 5 ]; do
    echo "Count: $count"
    ((count++))
done
echo "Loop finished."
```

4. Write a shell script to print array element using for loop

```
array=("apple" "banana" "cherry" "date")
echo "Array elements:"
for i in "${array[@]}"; do
    echo "$i"
done
```