

1. Greatest of Three Numbers

```
#!/bin/bash
if [ $1 -gt $2 ] && [ $1 -gt $3 ]; then
    echo "$1 is the greatest."
elif [ $2 -gt $3 ]; then
    echo "$2 is the greatest."
else
    echo "$3 is the greatest."
fi
```

./script.sh 10 20 30

2. Even or Odd

```
#!/bin/bash
if [ $((($1 % 2)) -eq 0 ); then
    echo "$1 is Even."
else
    echo "$1 is Odd."
fi
```

./script.sh 45

3. Average of n Numbers

```
#!/bin/bash
sum=0
count=$#
for num in "$@"; do
    sum=$((($sum + $num))
done
echo "Average: $(echo "$sum / $count" | bc -l)"
```

./script.sh 10 20 30 40

4. Prime Number Check

```
#!/bin/bash
n=$1
for ((i = 2; i <= n / 2; i++)); do
    if [ $((($n % $i)) -eq 0 ); then
        echo "$n is not a prime number."
        exit
    fi
done
echo "$n is a prime number."
```

./script.sh 17

5. Check if Input is a Number or String

```
#!/bin/bash
if [[ $1 =~ ^[0-9]+$ ]]; then
    echo "Input is a number."
else
    echo "Input is a string."
```

fi

./script.sh hello

6. Characters and Words in a File

```
#!/bin/bash
while read -r line; do
    echo "Line: $line"
    echo "Characters: ${#line}"
    echo "Words: $(echo $line | wc -w)"
done < $1
```

./script.sh sample.txt

7. Fibonacci Series

```
#!/bin/bash
a=0
b=1
n=$1
echo "Fibonacci series:"
for ((i = 0; i < n; i++)); do
    echo -n "$a "
    fn=$((a + b))
    a=$b
    b=$fn
done
echo
```

./script.sh 10

8. Factorial of a Number

```
#!/bin/bash
factorial=1
for ((i = 1; i <= $1; i++)); do
    factorial=$((factorial * i))
done
echo "Factorial: $factorial"
```

./script.sh 5

9. Sum of Digits

```
#!/bin/bash
num=$1
sum=0
while [ $num -gt 0 ]; do
    sum=$((sum + $num % 10))
    num=$((num / 10))
done
echo "Sum of digits: $sum"
```

./script.sh 12345

10. Palindrome String

```
#!/bin/bash
input=$1
reverse=$(echo $input | rev)
if [ "$input" == "$reverse" ]; then
    echo "$input is a palindrome."
else
    echo "$input is not a palindrome."
fi
```

./script.sh madam

11. String Length Validation

```
#!/bin/bash
if [ ${#1} -ge 5 ]; then
    echo "Valid string."
else
    echo "Invalid string: less than 5 characters."
fi
```

./script.sh "hello"

12. String Length

```
#!/bin/bash
echo "String length: ${#1}"
```

./script.sh "Greeshma"

13. Delete Matching Files in Two Directories

```
#!/bin/bash
for file in "$1"/*; do
    if [ -f "$2/${basename $file}" ]; then
        rm "$file"
    fi
done
```

./script.sh dir1 dir2

14. Display Running Processes

```
#!/bin/bash
for i in {1..3}; do
    ps
    sleep 30
done
```

./script.sh

15. Last Modification Time

```
#!/bin/bash
echo "Last modification time: $(stat -c %y $1)"
```

./script.sh file.txt

16. Check Spelling

```
#!/bin/bash  
spell $1
```

./script.sh file.txt

17. Encrypt Text File

```
#!/bin/bash  
cat $1 | tr 'A-Za-z' 'N-ZA-Mn-za-m' > encrypted_$1
```

./script.sh file.txt

18. Extract Wordlist

```
#!/bin/bash  
grep -oE '\w+' $1 | sort | uniq > wordlist.txt
```

./script.sh file.txt

19. Remove Blank Spaces

```
#!/bin/bash  
sed 's/ //g' $1 > no_spaces_$1
```

./script.sh file.txt

20. Convert Filenames to Lowercase

```
#!/bin/bash  
for file in "$@"; do  
    mv "$file" "$(echo $file | tr 'A-Z' 'a-z')"  
done
```

./script.sh File1.txt File2.txt

21. Translate Characters to Lowercase

```
#!/bin/bash  
tr 'A-Z' 'a-z' < $1 > lowercase_$1
```

./script.sh file.txt

22. Combine Files and Word Count

```
#!/bin/bash  
cat $1 $2 $3 > combined.txt  
wc -w combined.txt
```

./script.sh file1.txt file2.txt file3.txt

23. Split Odd and Even Lines

```
#!/bin/bash
awk 'NR % 2 == 0' $1 > evenfile
awk 'NR % 2 != 0' $1 > oddfile
```

./script.sh file.txt

24. Delete Even Lines

```
#!/bin/bash
awk 'NR % 2 != 0' $1 > temp && mv temp $1
```

./script.sh file.txt

25. Display System Information

```
#!/bin/bash
echo "Username: $USER"
echo "*****"
echo "Date and Time: $(date)"
echo "*****"
echo "Who is logged in:"
who
echo "*****"
```

./script.sh

Let me know if you'd like explanations or extensions for any of these!