EXP – 2

EX – 1

```
echo -n "Enter a number: "
read num
factorial=1
for ((i=1; i<=num; i++)); do
  factorial=$((factorial * i))
done
echo "Factorial of $num is $factorial"
```

EX – 2

```
#!/bin/bash
echo -n "Enter a number: "
read num
for ((i=1; i<=10; i++)); do
  echo "$num x $i = $((num * i))"
done
```

EX – 3

```
#!/bin/bash
echo -n "Enter a number: "
read num
reverse=0
```

```
while [ $num -gt 0 ]; do
  remainder=$((num % 10))
  reverse=$((reverse * 10 + remainder))
  num=$((num / 10))
done
echo "Reversed number: $reverse"
```

EX – 4

```
#!/bin/bash
for file in *; do
  echo "$file"
done
```

EX – 5

```
#!/bin/bash
echo -n "Enter a number (1-7): "
read day
case $day in
  1) echo "Sunday" ;;
  2) echo "Monday" ;;
  3) echo "Tuesday" ;;
  4) echo "Wednesday" ;;
  5) echo "Thursday" ;;
  6) echo "Friday" ;;
```

```
  7) echo "Saturday" ;;
  *) echo "Invalid input. Please enter a number between 1 and 7" ;;
esac
```

EX – 6

```
#!/bin/bash
echo "Select an operation: "
echo "1. Addition"
echo "2. Subtraction"
echo "3. Multiplication"
echo "4. Division"
read -p "Enter choice [1-4]: " choice
case $choice in
  1) read -p "Enter two numbers: " a b
     echo "Result: $((a + b))" ;;
  2) read -p "Enter two numbers: " a b
     echo "Result: $((a - b))" ;;
  3) read -p "Enter two numbers: " a b
     echo "Result: $((a * b))" ;;
  4) read -p "Enter two numbers: " a b
     if [ $b -eq 0 ]; then
       echo "Division by zero is not allowed"
     else
       echo "Result: $((a / b))"
     fi ;;
  *) echo "Invalid choice" ;;
```

esac