SHELL SCRIPTING

COMPUTER ENGINEERING

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INDEX

1. To find the sum of two numbers.
2. To copy file 1 on file 2 if u have read and write permission.
3. To find the Factorial of a number.
4. To check whether a number is odd or even.
5. To find ' a ' exponent ' b '.
6. To check whether a number is Prime or not.
7. To find the prime numbers between two given numbers.
8. To find the sum of digits of a number.
9. To find the product of digits of a number.
10. To check whether the entered year is leap year or not.
11. Conversion of alphabets of a file from small to capital letters.
12. Conversion of alphabets of a file from capital to small letters.
13. To convert a Decimal number to a Binary number.
14. To delete all lines from a file taken as input from the user containing a specific word eg - jamia .
15. To convert a binary number to a decimal number.
16. To check whether the entered user is logged in or not.

1. SHELL SCRIPT TO FIND THE SUM OF TWO NUMBERS.

```
#!/bin/bash
echo "Enter two numbers:"
read num1 num2
sum=`expr $num1 + $num2`
echo "sum of numbers is $sum"
```

2. SHELL SCRIPT TO COPY FILE 1 ON FILE 2 IF U HAVE READ AND WRITE PERMISSION

```
#!/bin/bash
echo -e "Enter two files:\c "
read x y
if [ -r $x -a -w $y ]
then
cp $x $y
echo files copied
else
echo  not copied
fi
```

3. SHELL SCRIPT TO FIND THE FACTORIAL OF A GIVEN NUMBER.

```bash
#!/bin/bash
echo -e "Enter a no: \c "
read n
fact=1
while [ $n -ne 0 ]
do
fact=`expr $fact \* $n`
n=`expr $n - 1`
done
echo "Factorial is $fact"
```

4. SHELL SCRIPT TO CHECK WHETHER A GIVEN NUMBER IS ODD OR EVEN.

```bash
#!/bin/bash
echo -e "Enter a number:\c"
read n
rem=`expr $n % 2`
if [ $rem -eq 0 ]
then
echo  "even"
else
echo "Odd"
fi
```

5. SHELL SCRIPT TO FIND a EXPONENET b

```bash
#!/bin/bash
echo enter a and b
read  a  b

i=1
power=1
while [ $i -le $b ]
do
power=`expr $power \* $a`
i=`expr $i + 1`
done
echo $power
```

6.SHELL SCRIPT TO CHECK WHETHER A GIVEN NUMBER IS PRIME OR NOT.

```bash
#!/bin/bash
echo -e "Enter a no:\c"
read n
flag=0   i=2
while [ $i -lt $n ]
do
rem=`expr $n % $i`
if [ $rem -eq 0 ]
then
flag=1
fi
i=`expr $i + 1`
done
```

```bash
if [ $flag -eq 0 ]
then
echo "prime"
else   echo "Non-Prime"
fi
```

7.SHELL SCRIPT TO FIND PRIME NUMBERS BETWEEN 2 GIVEN NUMBERS.

```bash
#!/bin/bash
echo -e "enter m and n: \c "
read m n
while [ $m -le $n ]
do
i=2
flag=0
while [ $i -lt $m ]
do
rem=`expr $m % $i`
if [ $rem -eq 0 ]
then
flag=1
fi
i=`expr $i +1`
done
if [ $flag -eq 0 ]
then
echo "$m "
fi
m=`expr $m + 1`
done
```

8.SHELL SCRIPT TO FIND SUM OF DIGITS OF A GIVEN NUMBER

```
#!/bin/bash
echo -e "Enter a no: \c "
read n
sum=0
while [ $n -ne 0 ]
do
rem=`expr $n % 10`
sum=`expr $sum + $rem`
n=`expr $n / 10`
done
echo $sum
```

9.SHELL SCRIPT TO FIND PRODUCT OF DIGITS OF A NUMBER.

```
#!/bin/bash
echo -e "Enter a no: \c "
read n
product=1
while [ $n -ne 0 ]
do
rem=`expr $n % 10`
product=`expr $product \* $rem`
n=`expr $n / 10`
done
echo $product
```

10. SHELL SCRIPT TO CHECK ENTERED YEAR IS LEAP YEAR OR NOT.

```bash
#!/bin/bash
echo -e "Enter year: \c "
read yr
if [ -z $yr ]
then
myyr=`expr $(date +'%y')`
t=`expr $myyr % 4`
if [ $t -eq 0 ]
then
echo leap
else
echo non-leap
fi
else
t=`expr $yr % 4`
if [ $t -eq 0 ]
then
echo leap
else
echo non-leap
fi
fi
```

11. SHELL SCRIPT FOR CONVERSION OF ALPHABETS OF A FILE FROM SMALL TO CAPITAL LETTERS.

```bash
#!/bin/bash
echo "Enter filename"
read f_name
tr a-z A-Z <$f_name> x
mv x $f_name
```

12. SHELL SCRIPT FOR CONVERSION OF ALPHABETS OF A FILE FROM CAPITAL TO SMALL LETTERS.

```bash
#!/bin/bash
echo Enter filename:
read fname
tr A-Z a-z <$fname> x
mv x $fname
```

13. SHELL SCRIPT TO CONVERT A DECIMAL NUMBER TO A BINARY NUMBER.

```
#!/bin/bash
echo Enter a Decimal no:
read n
power=1
bin=0
while [ $n -ne 0 ]
do
rem=`expr $n % 2`
bin=`expr $bin + $rem \* $power`
power=`expr $power \* 10`
n=`expr $n / 2`
done
echo $bin
```

14. SHELL SCRIPT TO DELETE LINES FROM A FILE CONTAING A SPECIFIC WORD.

```
#!/bin/bash
echo Enter filename
read fname
grep -v 'jamia' $fname> x
mv x $fname
```

15. SHELL SCRIPT TO CONVERT A BINARY NUMBER TO A DECIMAL NUMBER.

```
#!/bin/bash
echo Enter a Binory no:
read n
power=1
dec=0
while [ $n -ne 0 ]
do
rem=`expr $n % 10`
dec=`expr $dec + $rem \* $power`
power=`expr $power \* 2`
n=`expr $n / 10`
done
echo  $dec
```

16. SHELL SCRIPT TO CHECK WHETHER A USER IS LOGGED IN OR NOT.

```
#!/bin/bash
echo "Enter username"
read  user_name
if [ $? –eq 0 ]
who | grep "$user_name > /dev/null
then
echo  " $user_name is logged in
else
echo  " $user_name is not logged in
fi
```