### ANSWER TO THE QUESTION NO- 01

#!/bin/bach

ecro "Meace enter the numbers:"

read -a numbers

sum=0

for i in "simmbere [a]; do

sum = \$(expr \$sum + \$i)

done.

echo sum; \$sum

### ANSWER TO THE QUESTION NO-02

H!/bin/bash

file="check.tat"

if [-f "sfile"]; then

wordcount = wc -w < slile

echo "The word went of slile is: swordcount"

else

echo "file does not exist"

fi

# ANSWER TO THE QUESTION A0-03

HI/bin/bach

lik = "rewids.tat"

If [-f "ffik"]; then

linecount = we-1 < ffike

echo "The number of lines in ffike is: \$ linecount"

else

echo "file doce not exists"

file.

### ANSHER TO THE RUESTION NO-04

#!/bin/bach file="lag.tnt"

if [-f "office"]; then

temp-fix ="temp-log. tout"

while read -r leine; do

ecus "fflimilerror/issue }">> "Flemp-file"

done a "sfir"

mv " stemp-file " " " " " " " "

echo "Roplaced all occurance of 'error' with 'issue' in

else

cho "file does not exists"

fi

### ANGWER TO THE QUESTION NO- OF

时/bin/bash

file="nawes.tnt"

if C-f "ffile"]; then

word-count = 0

while read - r line; do

word-count = +((word-count + +(echo sline (we -w)))

done < "file"

ecno " the total number of words in trice is twoid-out"

else echo 'file does not exist'

li

```
ANOWER TO THE QUELTION NO -06
```

```
#1/bin/bach
9=0
12
(um=0
Count=10
for (1 1=0; iccount; 1++1)
do
     sum = $ ((sum + a))
      nent = 4((a+b))
      a = 96
      n= gneat
 done
 echo " the sum of the first to fibonacci numbers is a sim"
              ANSWER TO THE QUECTEON NO-07
#/bin/bash
echo " Enter a number :"
read num
factorial =1
if thum - It o ]; then
ever "Factorial is not defined for negative numbers"
else for (li=1; iemm; i++ ))
      factorial = $ (1 factorial * i)
   done
  echo " The factorial of enum is: "Factorial"
 Fi
```

#### AKWER TO THE QUESTION NO-8

#!/bin/bach fill="info.tat" if I-f "sliv" ]; then head -n 10, "sfile" else echo "File office does not exist" fi

### ANGUER TO THE QUESTEON NO-09

#! /bin/bash ari= ("apple" "banana" "apple" "orange" banana" "grape") anique=()

for item in "fair @]p"; do if [[! " stunique [@] } " = n " skitem } " ]; then un quet= ("sitem) fi

count = 95# unique [@]}

echo" The number of unique elements is: scount"

### ANSWER TO THE QUESTION NO-10

H!/bin/bach file - "data tat" if t-f "ffile"]; then tui -n 5 "4/ile"

else echo "File sfile does not enit."

fi

### ANSWER TO THE QUESTION NO -11

#!/bin/hash

file="output.tnt"

pattern="INFO"

if [-f "stile"]; then

count = \$ (grep -0 "Apattern" "stile") we -1)

etho "The pattern "spattern" appears \$ count times in

\$ file."

else echo "File ffile does not errist."
fi.

# ANSWER TO THE QUESTINN NO-12

H!/bin/bash
file="log-tat"

if [-f "sfile" ]; then
fac "srive"> temp-file && mv temp-file "sfile"
echo "The order of liws in a file has been reversed:
else
echo "The file does not enists."

fi.

```
ANOWER TO THE QUESTION NO -13
```

```
#1/bin/bash
file = "priority"
if I - 1 " stile" ]; then
     grep "spattern" "sfile"
e158
      echo "File stile does not exist"
fi
```

# ANSWER TO THE QUECTION NOTY

```
#1/bin/bash
echi "Enter a number oi;"
read N
product =1
term=1
for (( =1; i(=N; i++)); do
      product = 4(1 product * term)
       term = $ ((term # 10+1))
 done
  ecus "The product of the series is: sproduct"
```

ANSWER TO THE QUESTION NO- 15

```
#1/bin/bash
eino "Enter a number N:"
 read N
 product =1
 term = 10
for (( i=1; i <= H, i+T)); do
   product = $ ( product * term)
    term = 4 ((term + 10))
  done
echo " the product of the series is : sproduct?
```

ANGWER TO THE QUESTION NO-16

Humn/pash GYY=(12 45 67 34 89 23 56) largest-starred for num in "sharriogs" do if [ fnum - 9t glargest]; then lux sest = 3 mum

Fi done em "the capitst element in the array is: \$ largest"

### ANSWER TO THE QUESTLON NO 47

#1/bin/bash

mymbers=(2 4 6 8 10)

total = 0

for number in "shimbers [@]

square=\$(( mumber \* number) total = \$ (( total + square ))

done

echo "The sum of squares is: 9 total"

# ANSWER TO THE QUESTION NO-18

HI/ bin/ bash file= "task.tat" word= "completed" if grep - q "sword" "sfile"; then echo "found"

else echo " Not found "

X,º

#!/vin/bach

fix = "names ton"

If [-f "sfix"]; then

white IFS = read -r line

do names = (sline)

echo " sfnames[2] f, strumes[1] f, shames[0]!"

done c " sfix"

else

echo " fix sfix does not exist."

Ti.

# ANSWER TO THE QUESTION NO. 20

#1/bir/bash

echo "Enter the word to search for:"

vead word.

file="notes.tnt"

IY [ -f "sfile"]; then.

Count=\$(grep-o-i "sword" "file") we -D

evho " The word" "sword" appears \$count times in

stile"

else

ceho "File grive does not entits."

**CS** CamScanner

### ANGNER TO THE QUESTION NO- 4

HI/ bin/nash fill= '200.tat'

ff [-f "sfile"]; then

grop -v 'All: space: 11 " f' iffile"> temp-file && mv temp-file

"Stile"

echo "PII blanck lines have been removede from silu'

else. euro "Fill does not enist"

ti

### ANSWER TO THE QUESTION NO.22

#1/bin/bash eino "Enter the filenames ( seperated by spaces):" read - a filenames for file in "sifficenamest@]4"

do

if [ -f "ffice" ]; then 1

- echo "Sorted contents of afice" Sort " 4file"

echo

else

echo "The five does not enist"

fi done

### ANGWER TO THE QUESTEON NO -25

#1/bin/bosh

file= "data tot"

if [-f "sfile"]; then

size = s(start -- for mat = "%s" "sfile")

etho " The size of sfile is "size bytes"

else

cleno "file sfile does not exist."

Fi

# ANSWER TO THE QUESTION NO- 29

H!/bin/bash

echo "Enter elimints of the array"

read -a numbers

sum=0

for num in "\*\*\numbers[@]]"

do

if [ \num - \gammat 10 ]; \ten

sum = \sum \( \cap ( \num \num ) \)

fi

done

echo "The sum of numbers greater than 10 is; \sum'

#### ANSWER TO THE QUESTION NO. 25

Hybiny bash
etho "Enfer your fill name:"
rend first name last name.
first
etho "first Name" sfirst name"
etho "Last Name: slast-vame"

### ANSWER TO THE QUESTION NO -26

#!/bin/bash

echs "Enter the word to find:"

read find-word,

echo "Enter the word to replace it with:"

read replace-word

fix = "document.tat"

It I - I "Ifile" J; then

sed -i "s/afind-word/sreplace-word/g" "sfire"

cahe "Replaced all occurations or "sfind-word"

with 'I replace-word' in stice."

abo "file still does not anist."

17

### ANGWER TO THE QUESTION DO- 27

file="logfile text"
datess "sfile"
echo "current date and time appended to sfile."

# ANSWER TO THE QUESTION NO -23

#1/bin/bash

ccho "Enter the numbers ;"

Yead -a num;

Sum=0

For n in "59 numst@Jo"; do

Sum -\$(echo "\$sum + \$n' 1 bg)

done

count = \$f#numst@Jo; then

avg = \$(echo "\$gum / \$count" 1 bc -1/

echo "The avarasc is: \$avg"

else

ceno "Envalld"

Fi

# ANSWER TO THE QUESTIONS NO -29

A!/bin/bash
file-count = & (15-1 | grep -v "d' | grep -c ")

dir-count = \$ (15-1 | grep 'Nd' | grep -c ")

echo "Number of files: \$ file-count"

echo "Number of directories: \$ dir-count"

ANSWER TO THE QUESTION NO-30

HI/ bin/bash
soft -r dafa.tat