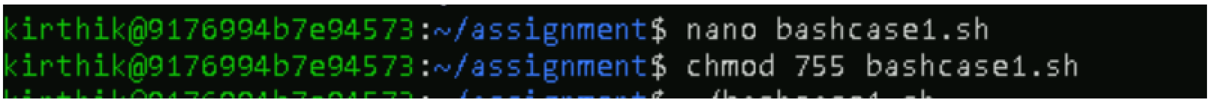
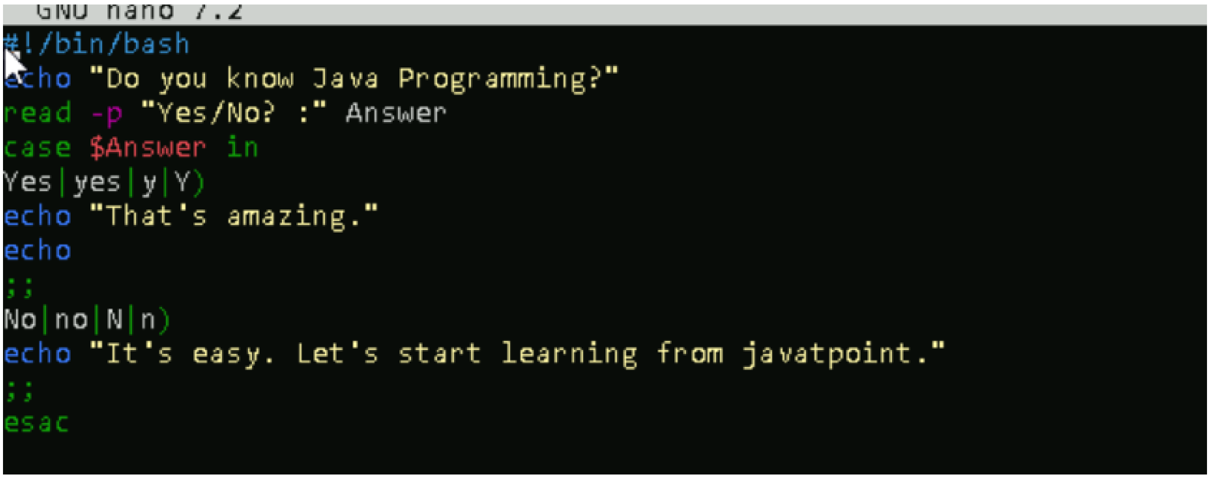
SWITCHCASE:

CREATING FILE:



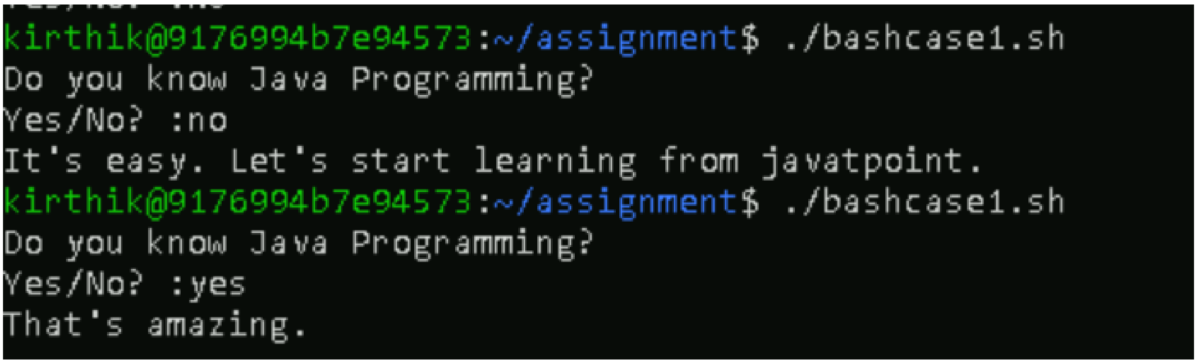
```
kirthik@9176994b7e94573:~/assignment$ nano bashcase1.sh
kirthik@9176994b7e94573:~/assignment$ chmod 755 bashcase1.sh
```

SCRIPT:



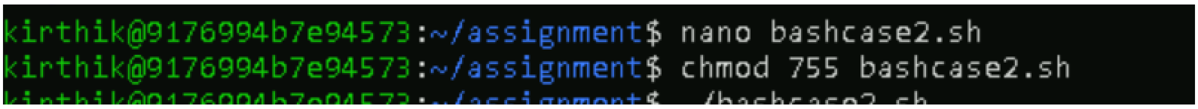
```
  GNU nano 7.2
#!/bin/bash
echo "Do you know Java Programming?"
read -p "Yes/No? :" Answer
case $Answer in
Yes|yes|y|Y)
echo "That's amazing."
echo
;;
No|no|N|n)
echo "It's easy. Let's start learning from javatpoint."
;;
esac
```

OUTPUT:



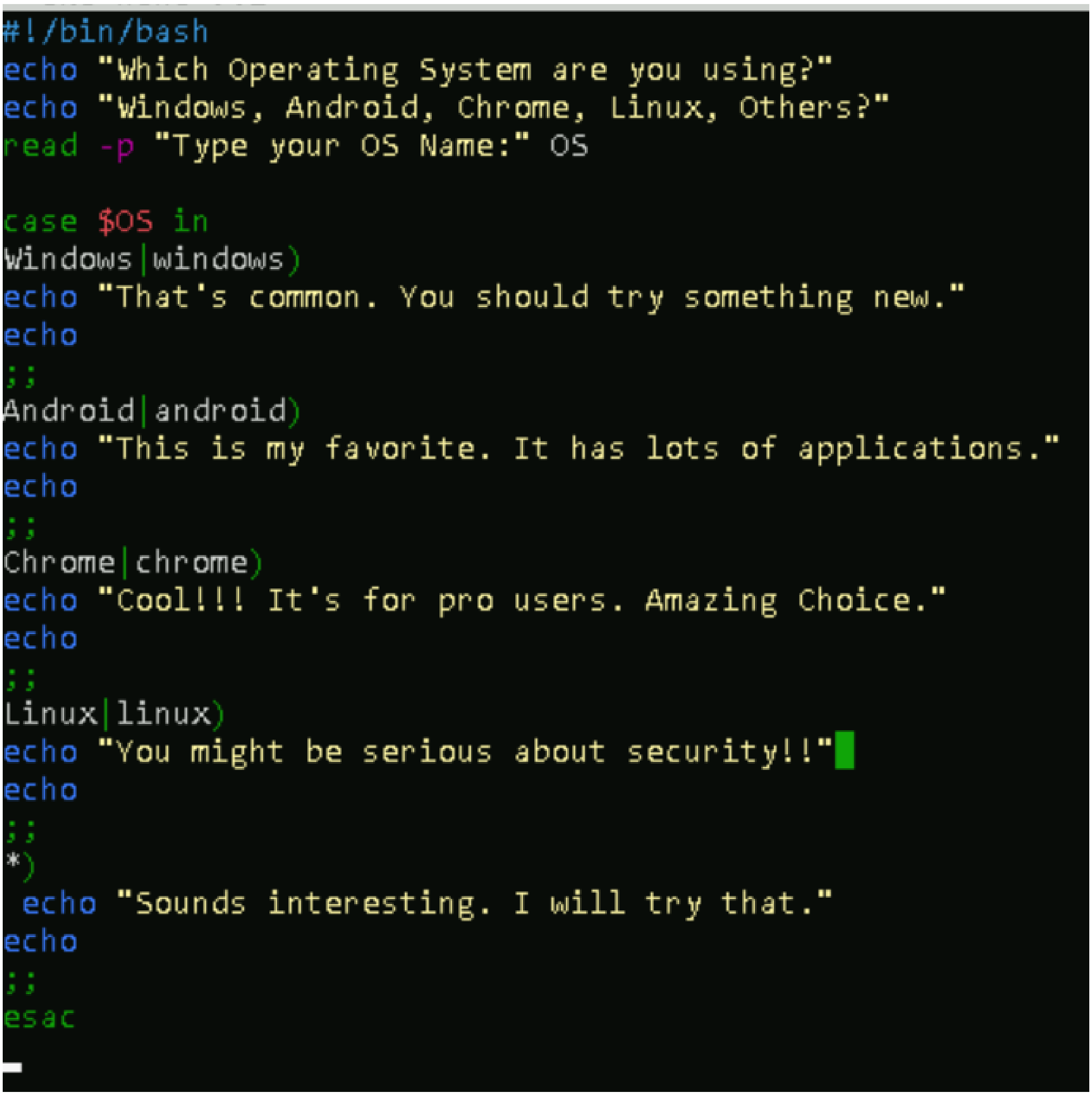
```
kirthik@9176994b7e94573:~/assignment$ ./bashcase1.sh
Do you know Java Programming?
Yes/No? :no
It's easy. Let's start learning from javatpoint.
kirthik@9176994b7e94573:~/assignment$ ./bashcase1.sh
Do you know Java Programming?
Yes/No? :yes
That's amazing.
```

CREATING FILE:



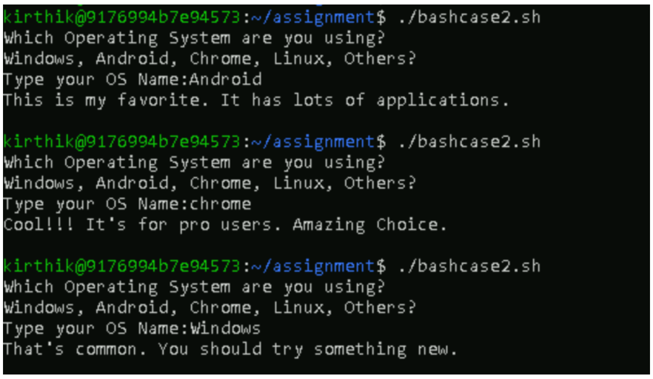
```
kirthik@9176994b7e94573:~/assignment$ nano bashcase2.sh
kirthik@9176994b7e94573:~/assignment$ chmod 755 bashcase2.sh
kirthik@9176994b7e94573:~/assignment$ ./bashcase2.sh
```

SCRIPT:



```
#!/bin/bash
echo "Which Operating System are you using?"
echo "Windows, Android, Chrome, Linux, Others?"
read -p "Type your OS Name:" OS

case $OS in
Windows|windows)
echo "That's common. You should try something new."
echo
;;
Android|android)
echo "This is my favorite. It has lots of applications."
echo
;;
Chrome|chrome)
echo "Cool!!! It's for pro users. Amazing Choice."
echo
;;
Linux|linux)
echo "You might be serious about security!!"
echo
;;
*)
 echo "Sounds interesting. I will try that."
echo
;;
esac
```

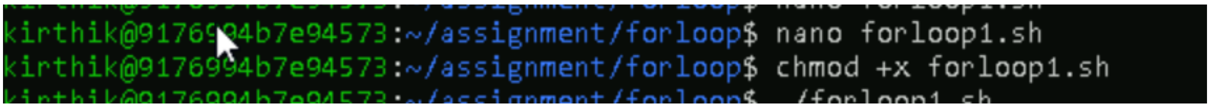
OUTPUT:



```
kirthik@9176994b7e94573:~/assignment$ ./bashcase2.sh
Which Operating System are you using?
Windows, Android, Chrome, Linux, Others?
Type your OS Name:Android
This is my favorite. It has lots of applications.

kirthik@9176994b7e94573:~/assignment$ ./bashcase2.sh
Which Operating System are you using?
Windows, Android, Chrome, Linux, Others?
Type your OS Name:chrome
Cool!!! It's for pro users. Amazing Choice.

kirthik@9176994b7e94573:~/assignment$ ./bashcase2.sh
Which Operating System are you using?
Windows, Android, Chrome, Linux, Others?
Type your OS Name:Windows
That's common. You should try something new.
```

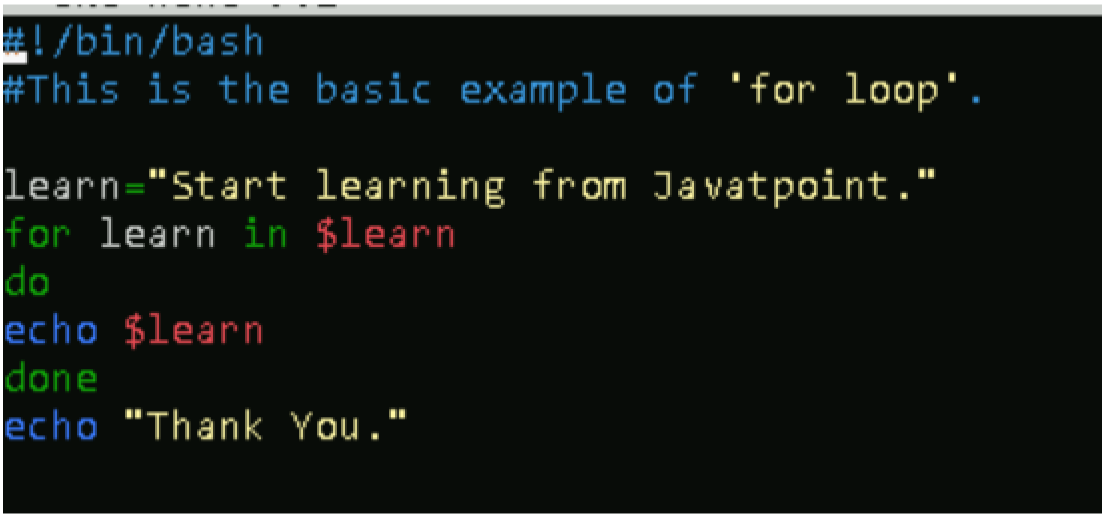
FOR LOOP:

CREATING FILE:



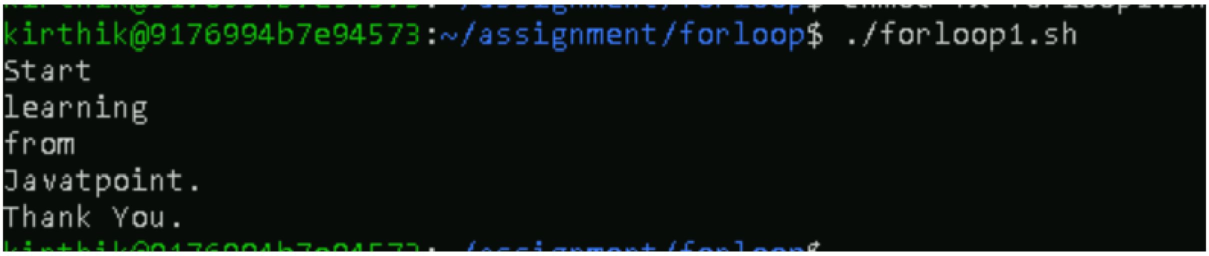
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano forloop1.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x forloop1.sh
```

SCRIPT:



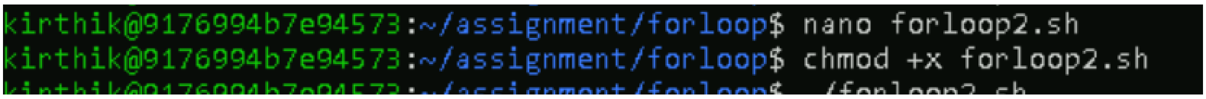
```
#!/bin/bash
#This is the basic example of 'for loop'.

learn="Start learning from Javatpoint."
for learn in $learn
do
echo $learn
done
echo "Thank You."
```

OUTPUT:



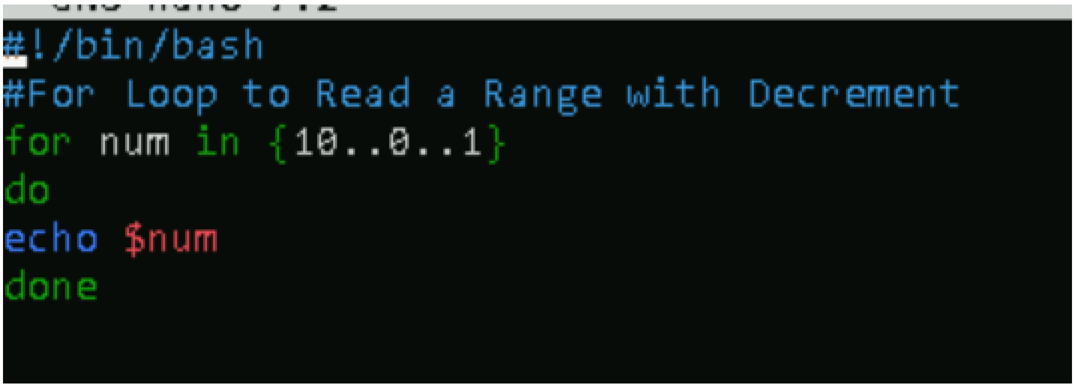
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./forloop1.sh
Start
learning
from
Javatpoint.
Thank You.
```

CREATING FILE:



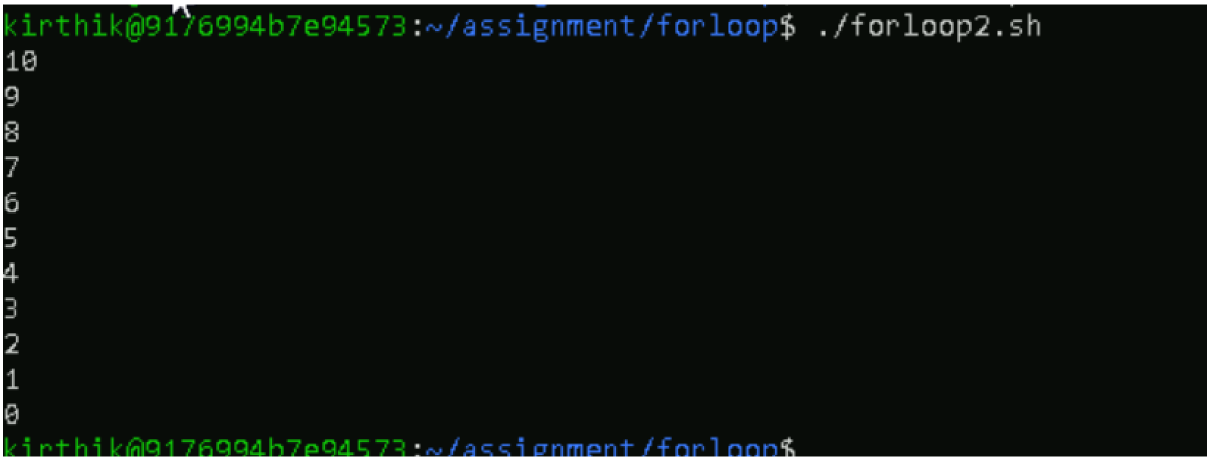
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano forloop2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x forloop2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./forloop2.sh
```

SCRIPT:



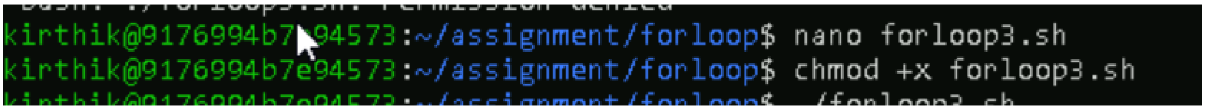
```
  GNU nano 7.2
#!/bin/bash
#For Loop to Read a Range with Decrement
for num in {10..0..1}
do
echo $num
done
```

OUTPUT:



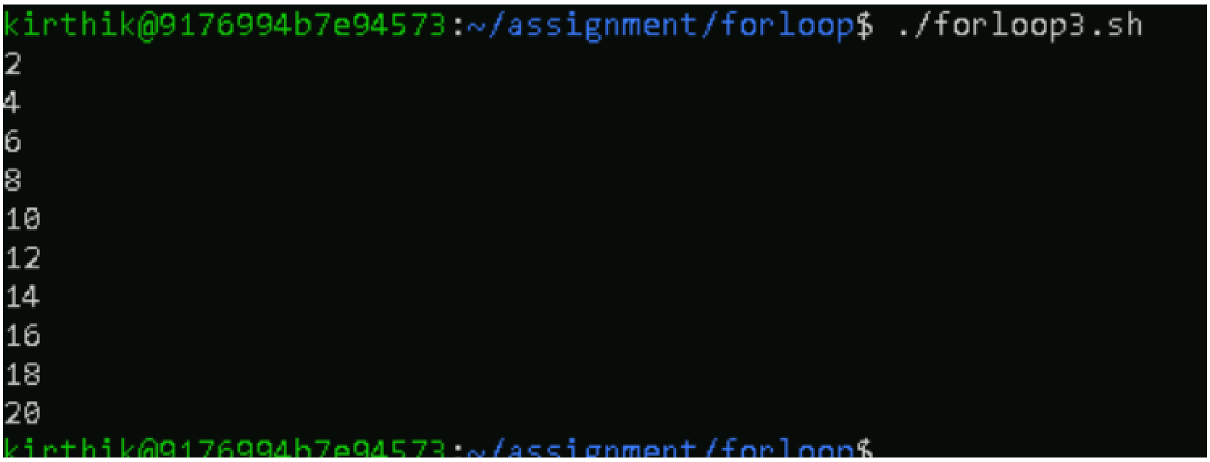
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./forloop2.sh
10
9
8
7
6
5
4
3
2
1
0
kirthik@9176994b7e94573:~/assignment/forloop$
```

CREATING FILE:



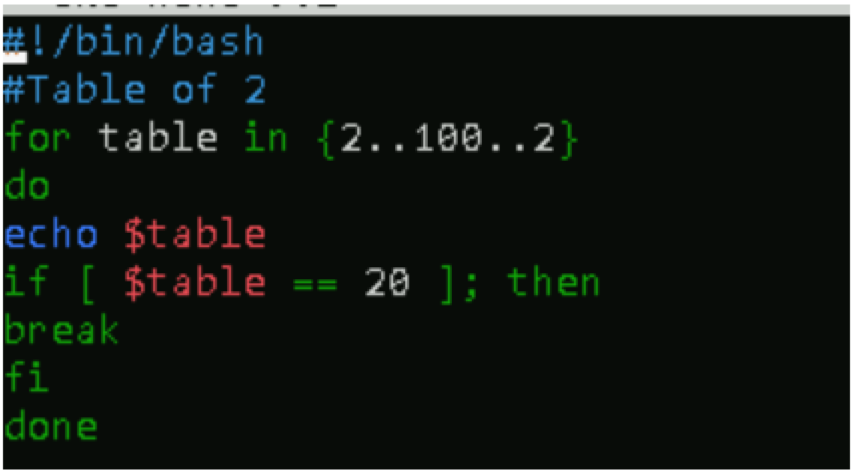
```
bash: ./forloop3.sh: Permission denied
kirthik@9176994b7e94573:~/assignment/forloop$ nano forloop3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x forloop3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./forloop3.sh
```

SCRIPT:



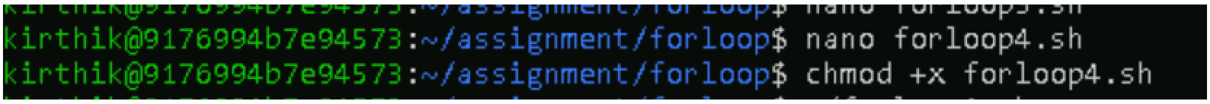
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./forloop3.sh
2
4
6
8
10
12
14
16
18
20
kirthik@9176994b7e94573:~/assignment/forloop$
```

OUTPUT:



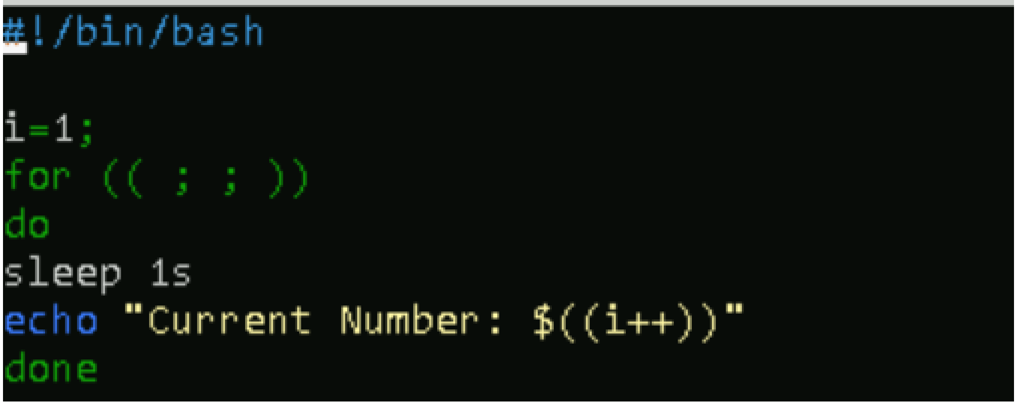
```
#!/bin/bash
#Table of 2
for table in {2..100..2}
do
echo $table
if [ $table == 20 ]; then
break
fi
done
```

CREATING FILE:



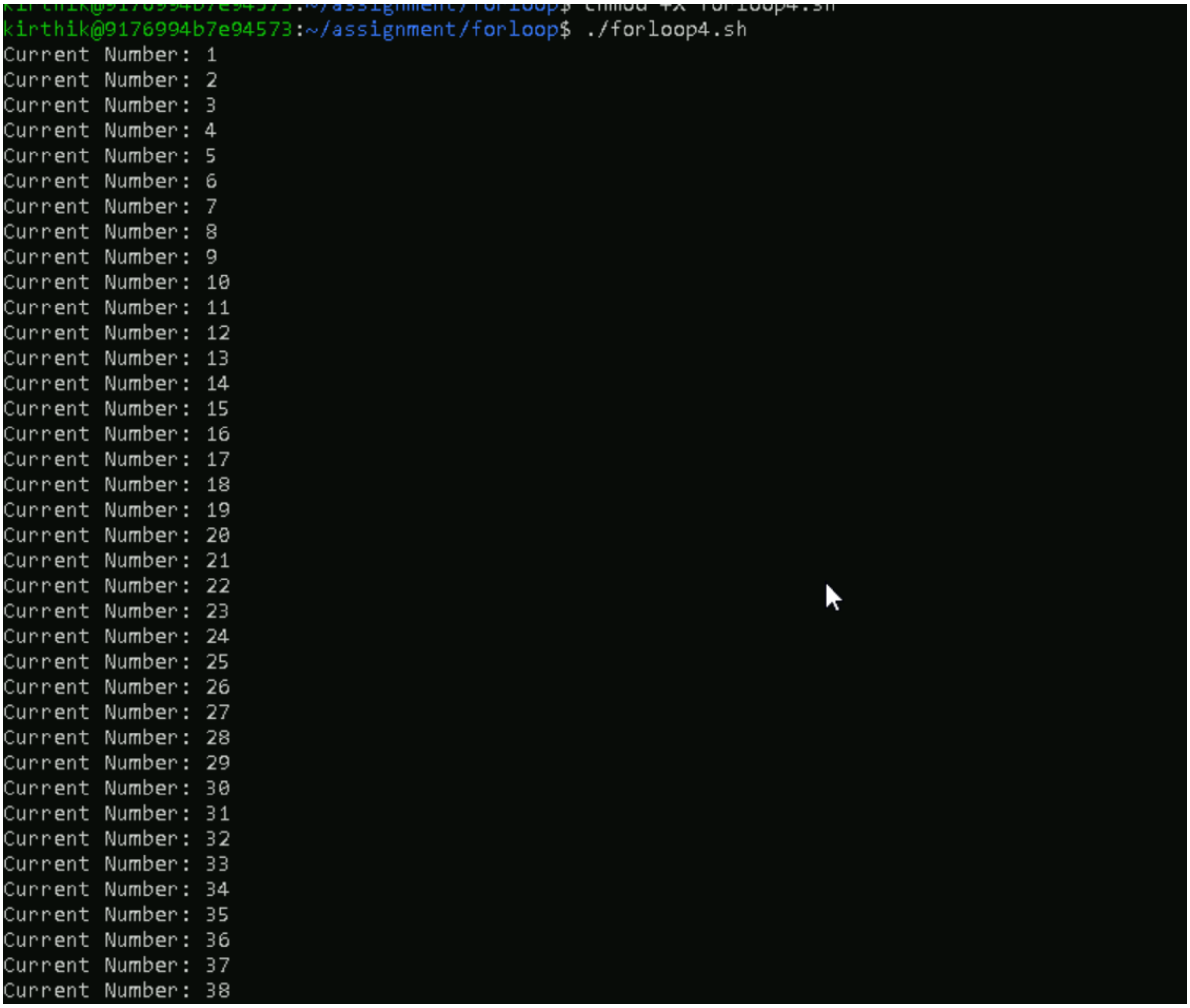
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano forloop3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ nano forloop4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x forloop4.sh
```

SCRIPT:



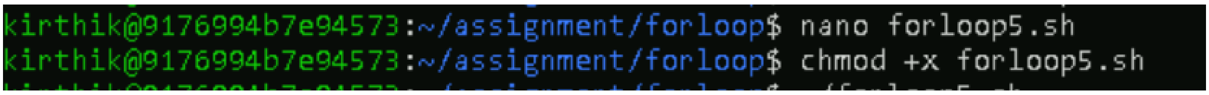
```
#!/bin/bash

i=1;
for (( ; ; ))
do
sleep 1s
echo "Current Number: $((i++))"
done
```

OUTPUT:



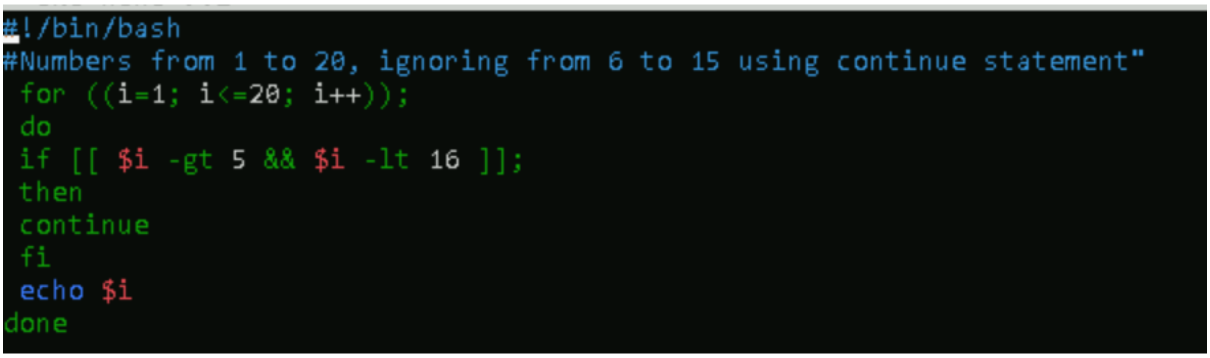
```
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x forloop4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./forloop4.sh
Current Number: 1
Current Number: 2
Current Number: 3
Current Number: 4
Current Number: 5
Current Number: 6
Current Number: 7
Current Number: 8
Current Number: 9
Current Number: 10
Current Number: 11
Current Number: 12
Current Number: 13
Current Number: 14
Current Number: 15
Current Number: 16
Current Number: 17
Current Number: 18
Current Number: 19
Current Number: 20
Current Number: 21
Current Number: 22
Current Number: 23
Current Number: 24
Current Number: 25
Current Number: 26
Current Number: 27
Current Number: 28
Current Number: 29
Current Number: 30
Current Number: 31
Current Number: 32
Current Number: 33
Current Number: 34
Current Number: 35
Current Number: 36
Current Number: 37
Current Number: 38
```

CREATING FILE:



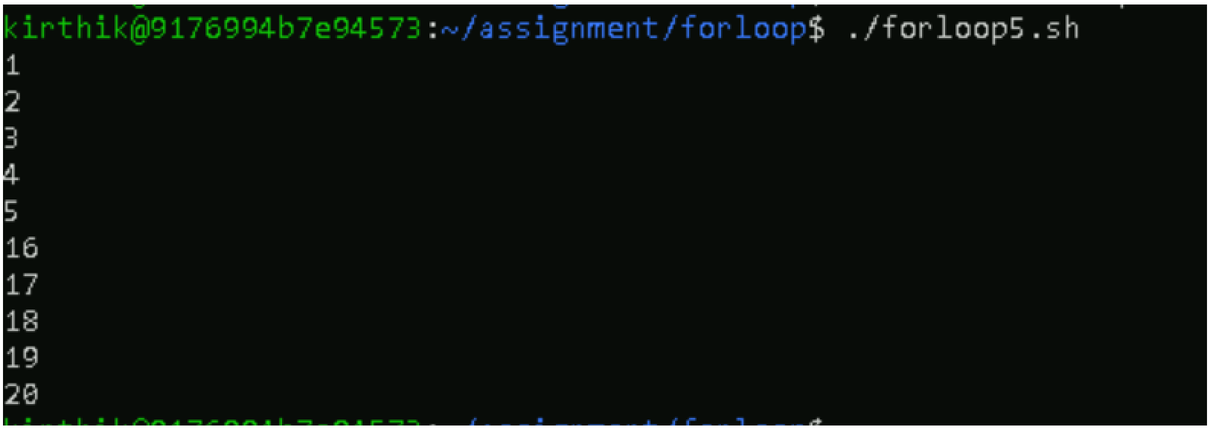
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano forloop5.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x forloop5.sh
```

SCRIPT:



```
#!/bin/bash
#Numbers from 1 to 20, ignoring from 6 to 15 using continue statement"
 for ((i=1; i<=20; i++));
 do
 if [[ $i -gt 5 && $i -lt 16 ]];
 then
 continue
 fi
 echo $i
done
```

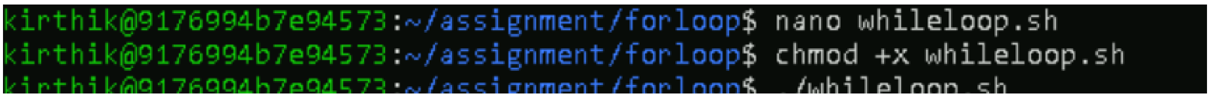
OUTPUT:



```
kirthik@9176994b7e94573:~/assignment/forloop$ ./forloop5.sh
1
2
3
4
5
16
17
18
19
20
```

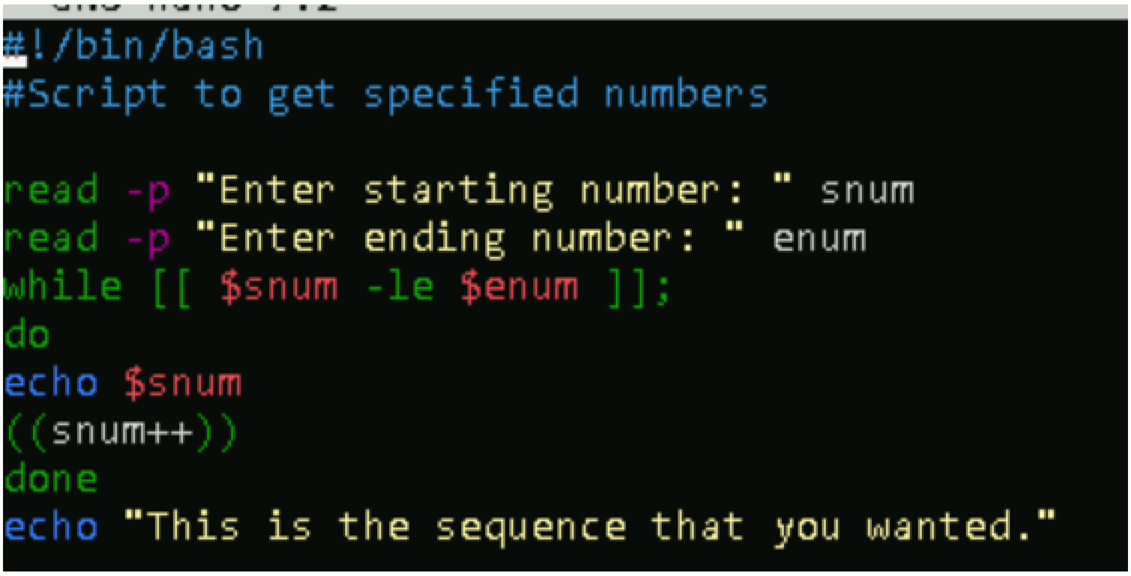
DO WHILE LOOP

CREATING FILE:



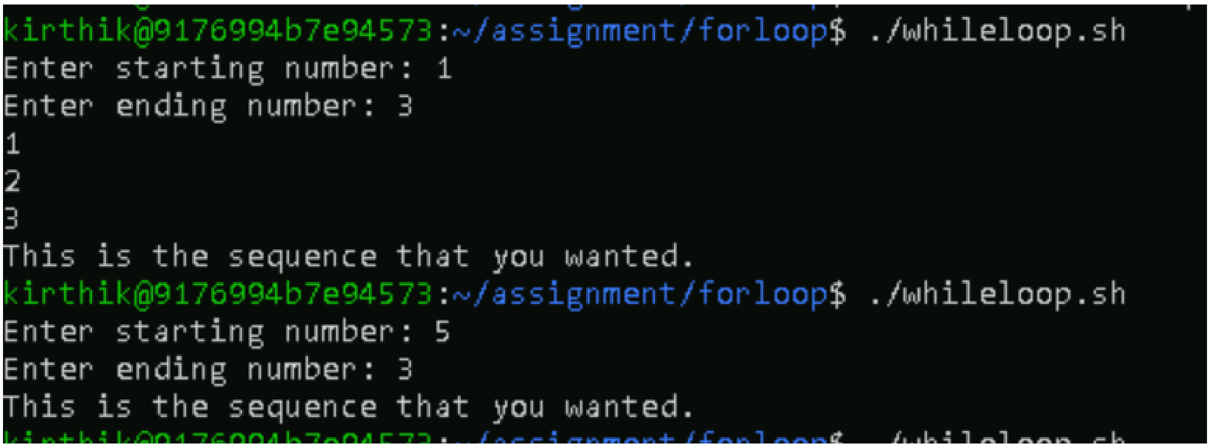
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano whileloop.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x whileloop.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop.sh
```

SCRIPT:



```
#!/bin/bash
#Script to get specified numbers

read -p "Enter starting number: " snum
read -p "Enter ending number: " enum
while [[ $snum -le $enum ]];
do
echo $snum
((snum++))
done
echo "This is the sequence that you wanted."
```

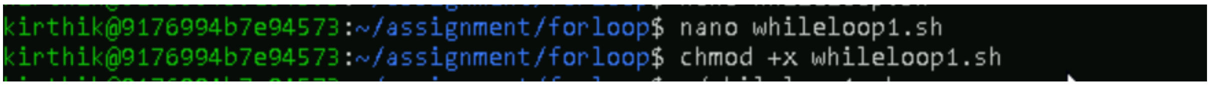
OUTPUT:



```
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop.sh
Enter starting number: 1
Enter ending number: 3
1
2
3
This is the sequence that you wanted.
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop.sh
Enter starting number: 5
Enter ending number: 3
This is the sequence that you wanted.
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop.sh
```

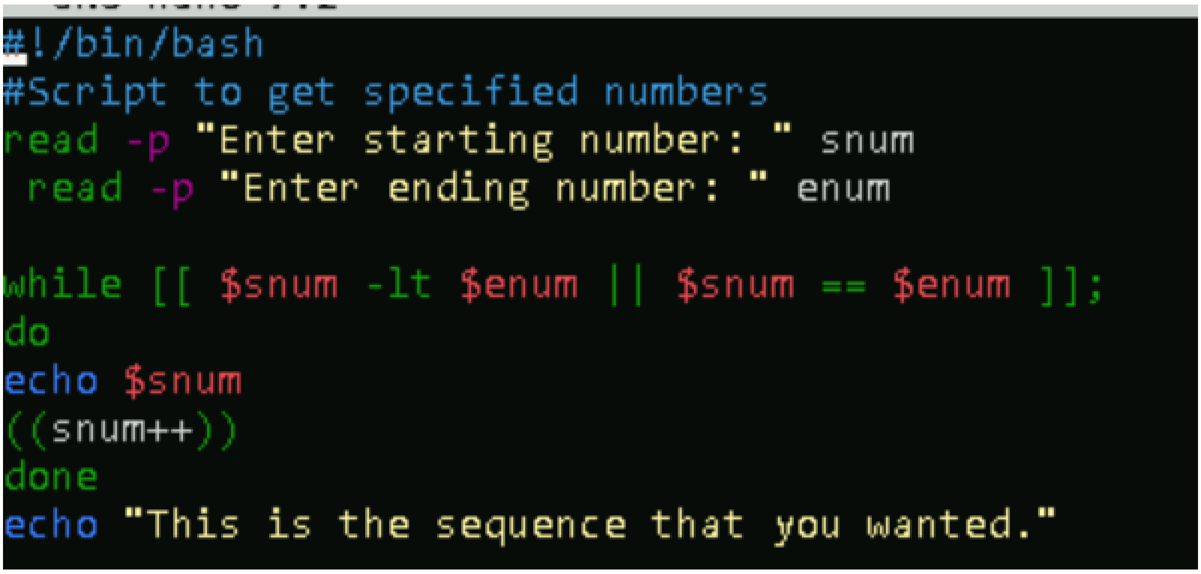
WHILELOOP

CREATING FILE:



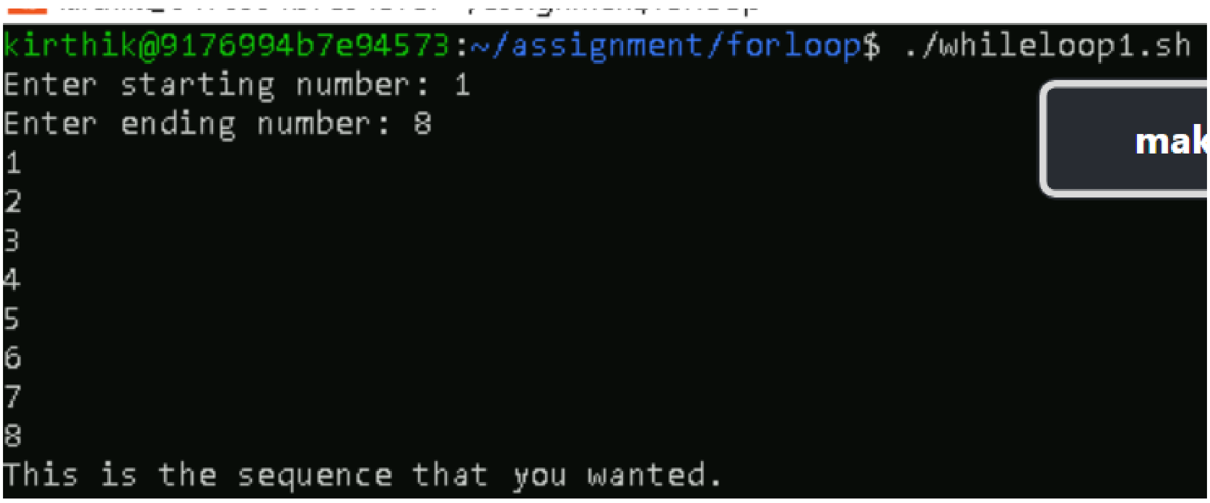
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano whileloop1.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x whileloop1.sh
```

SCRIPT:



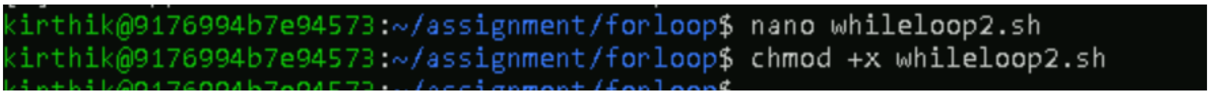
```
#!/bin/bash
#Script to get specified numbers
read -p "Enter starting number: " snum
 read -p "Enter ending number: " enum

while [[ $snum -lt $enum || $snum == $enum ]];
do
echo $snum
((snum++))
done
echo "This is the sequence that you wanted."
```

OUTPUT:



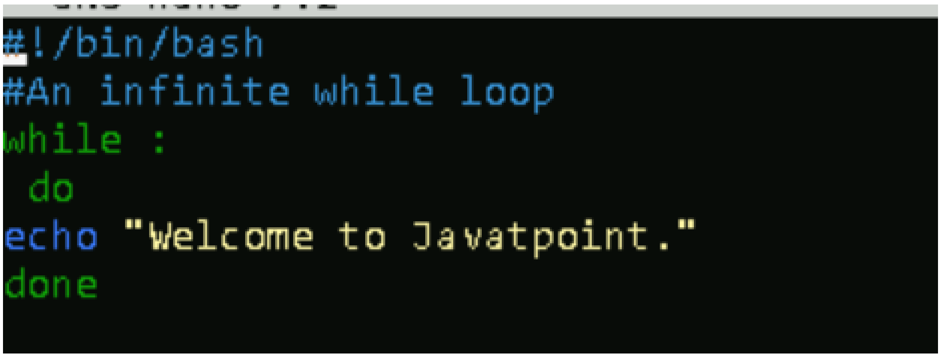
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop1.sh
Enter starting number: 1
Enter ending number: 8
1
2
3
4
5
6
7
8
This is the sequence that you wanted.
```

CREATING FILE:



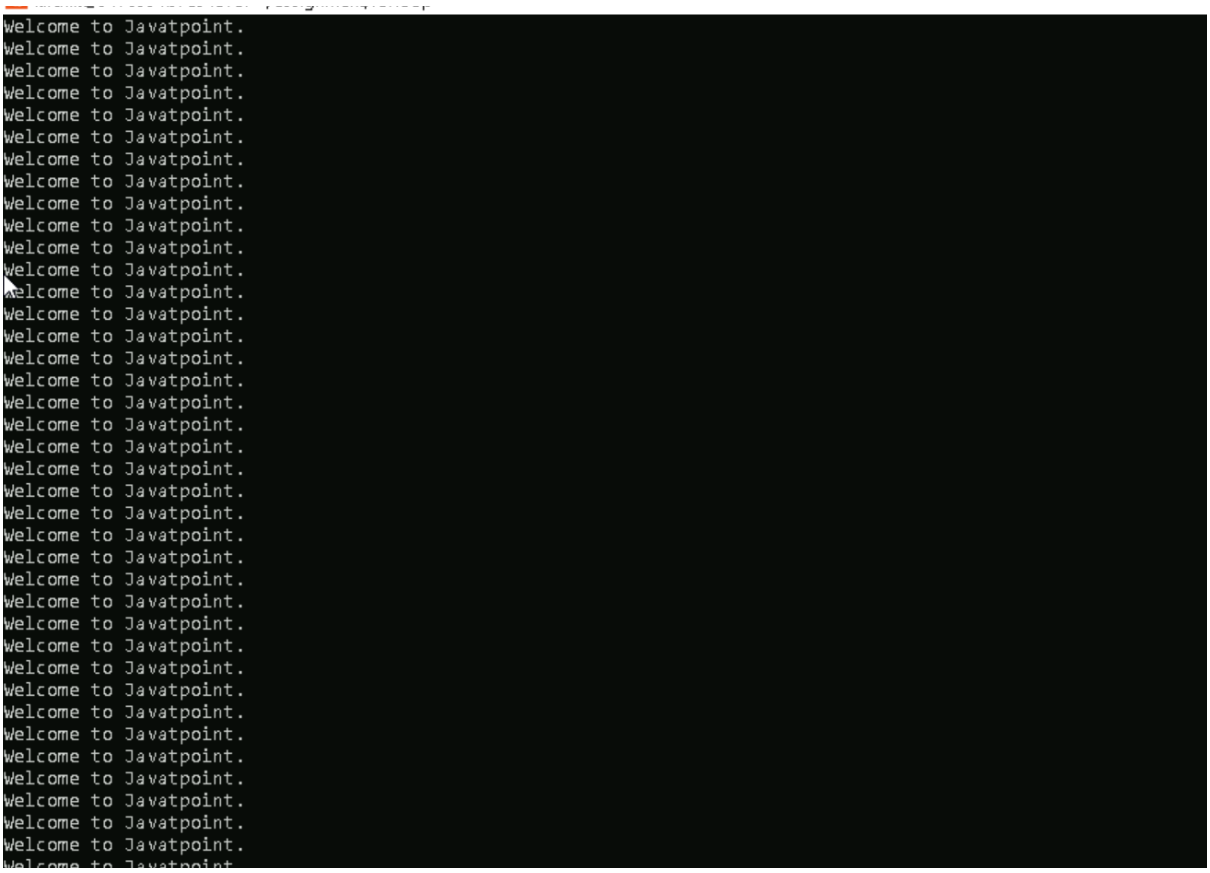
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano whileloop2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x whileloop2.sh
kirthik@9176994b7e94573:~/assignment/forloop$
```

SCRIPT:



```
#!/bin/bash
#An infinite while loop
while :
 do
echo "Welcome to Javatpoint."
done
```

OUTPUT



```
Welcome to Javatpoint.
Welcome to Javatpoint.
Welcome to Javatpoint.
Welcome to Javatpoint.
Welcome to Javatpoint.
Welcome to Javatpoint.
Welcome to Javatpoint.
Welcome to Javatpoint.
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Welcome to Javatpoint.
Welcome to Javatpoint.
Welcome to Javatpoint.
Welcome to Javatpoint.
```
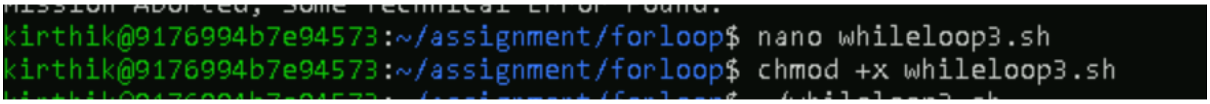
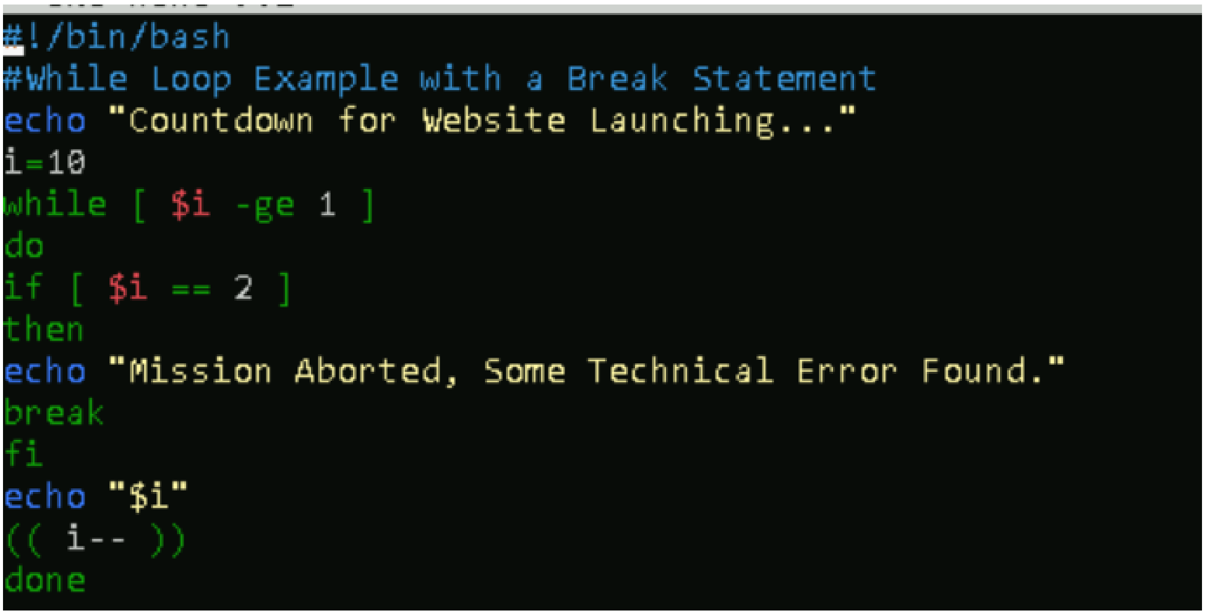

CREATING FILE:



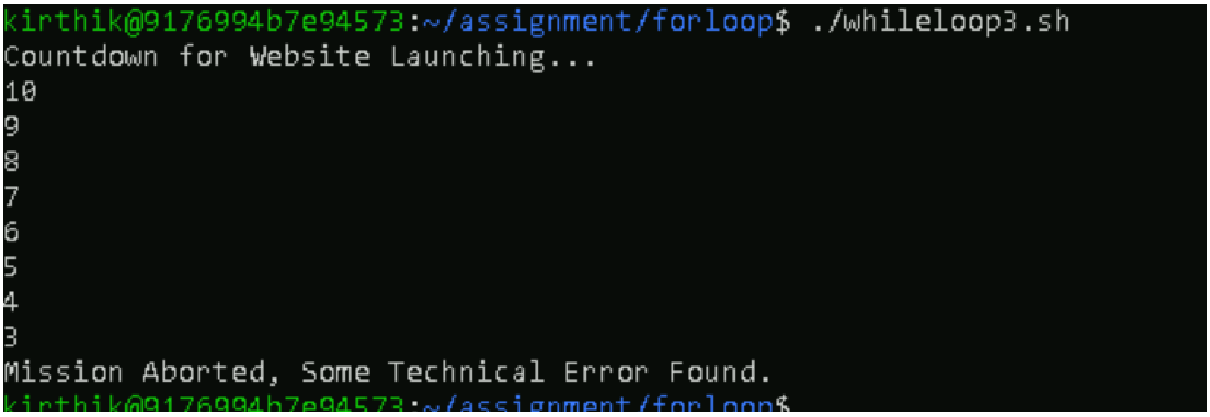
```
Mission Aborted, Some Technical Error Found.
kirthik@9176994b7e94573:~/assignment/forloop$ nano whileloop3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x whileloop3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop3.sh
```

SCRIPT:



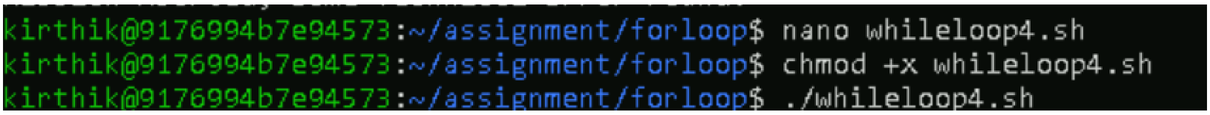
```
#!/bin/bash
#While Loop Example with a Break Statement
echo "Countdown for Website Launching..."
i=10
while [ $i -ge 1 ]
do
if [ $i == 2 ]
then
echo "Mission Aborted, Some Technical Error Found."
break
fi
echo "$i"
(( i-- ))
done
```

OUTPUT:



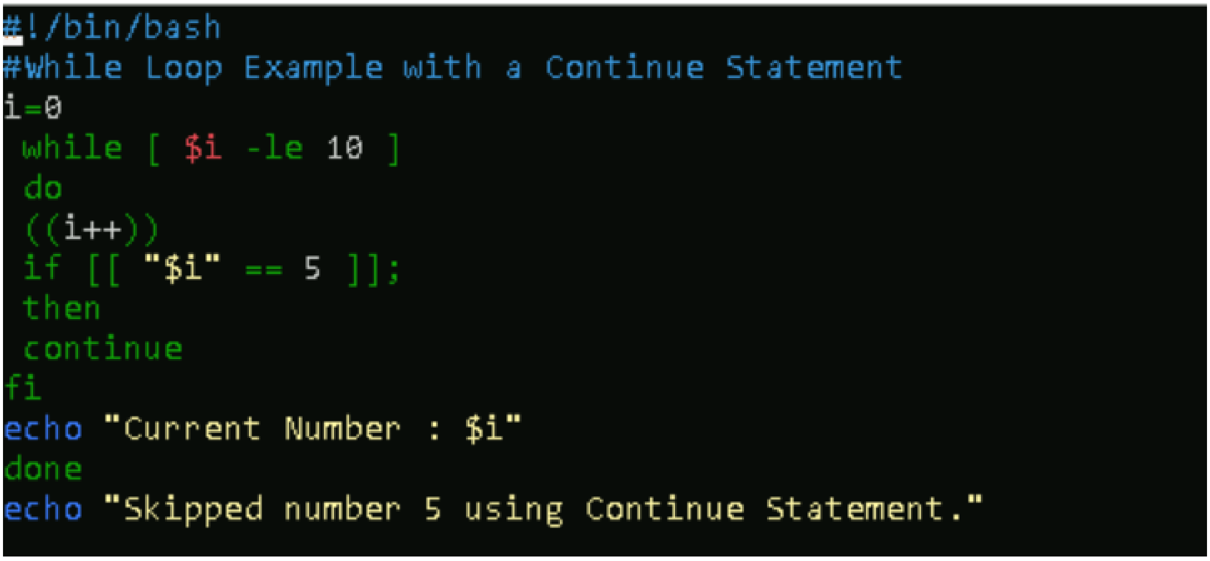
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop3.sh
Countdown for Website Launching...
10
9
8
7
6
5
4
3
Mission Aborted, Some Technical Error Found.
kirthik@9176994b7e94573:~/assignment/forloop$
```

CREATING FILES:



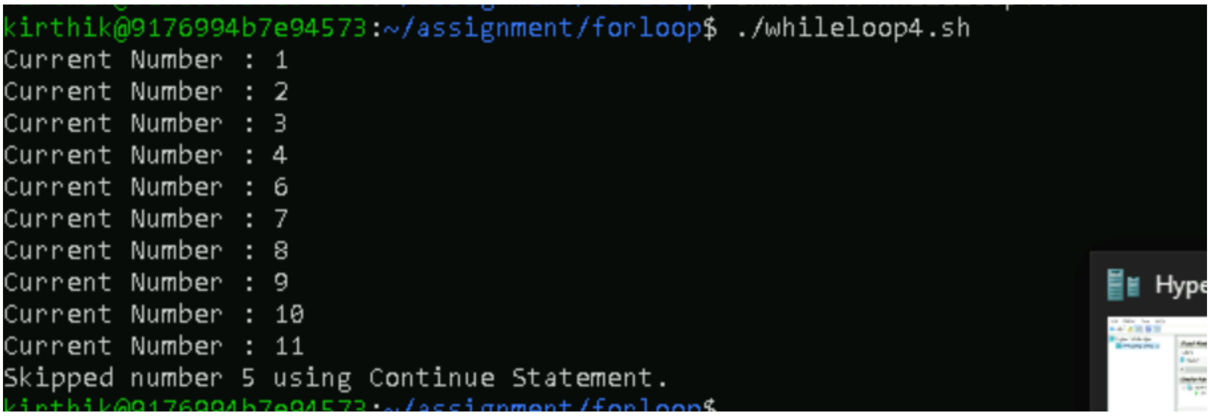
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano whileloop4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x whileloop4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop4.sh
```

SCRIPT:



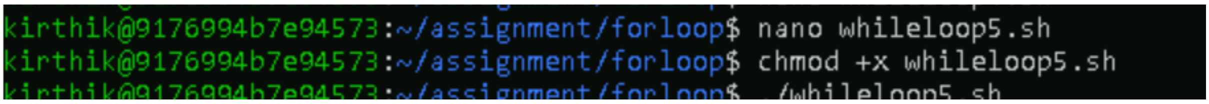
```
#!/bin/bash
#While Loop Example with a Continue Statement
i=0
 while [ $i -le 10 ]
 do
 ((i++))
 if [[ "$i" == 5 ]];
 then
 continue
fi
echo "Current Number : $i"
done
echo "Skipped number 5 using Continue Statement."
```

OUTPUT:



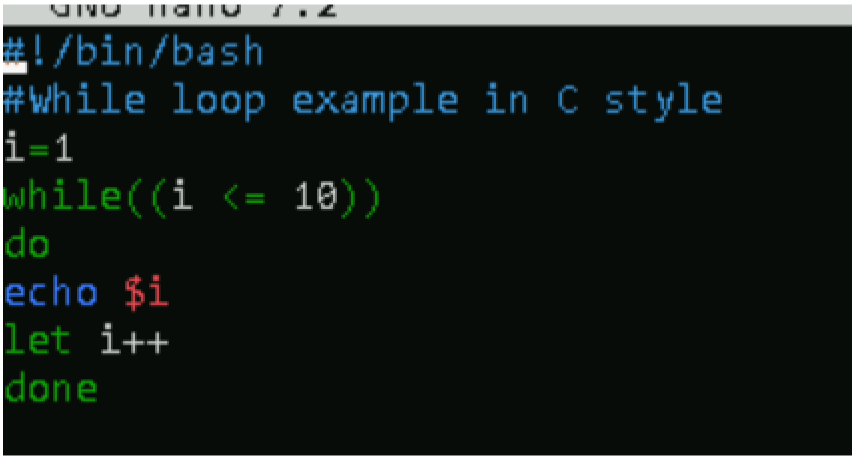
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop4.sh
Current Number : 1
Current Number : 2
Current Number : 3
Current Number : 4
Current Number : 6
Current Number : 7
Current Number : 8
Current Number : 9
Current Number : 10
Current Number : 11
Skipped number 5 using Continue Statement.
kirthik@9176994b7e94573:~/assignment/forloop$
```

CREATING FILE:



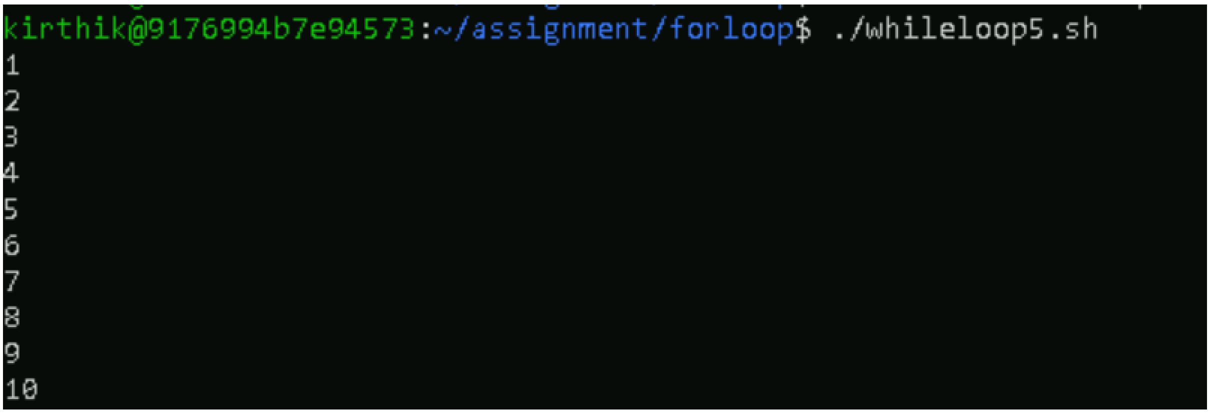
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano whileloop5.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x whileloop5.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop5.sh
```

SCRIPT:



```
  GNU nano 7.2
#!/bin/bash
#While loop example in C style
i=1
while((i <= 10))
do
echo $i
let i++
done
```

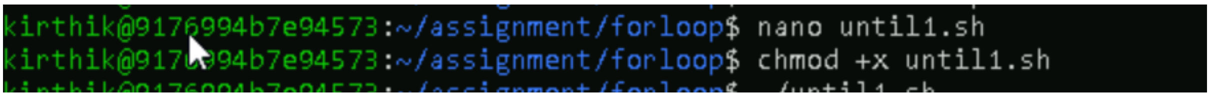
OUTPUT:



```
kirthik@9176994b7e94573:~/assignment/forloop$ ./whileloop5.sh
1
2
3
4
5
6
7
8
9
10
```

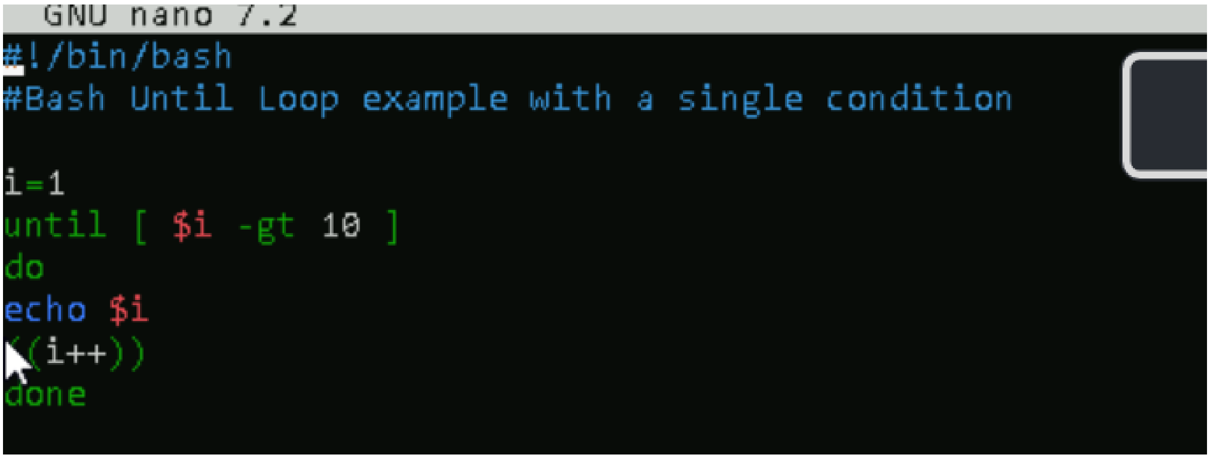
UNTIL

CREATING FILE:



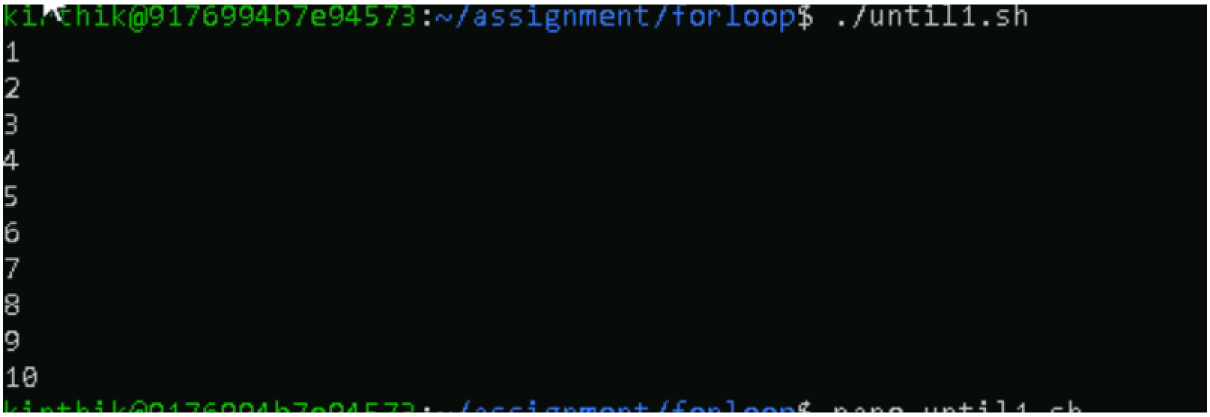
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano until1.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x until1.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./until1.sh
```

SCRIPT:



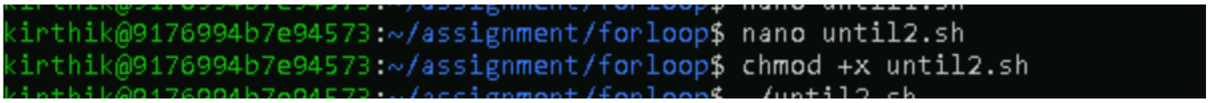
```
  GNU nano 7.2
#!/bin/bash
#Bash Until Loop example with a single condition

i=1
until [ $i -gt 10 ]
do
echo $i
((i++))
done
```

OUTPUT:



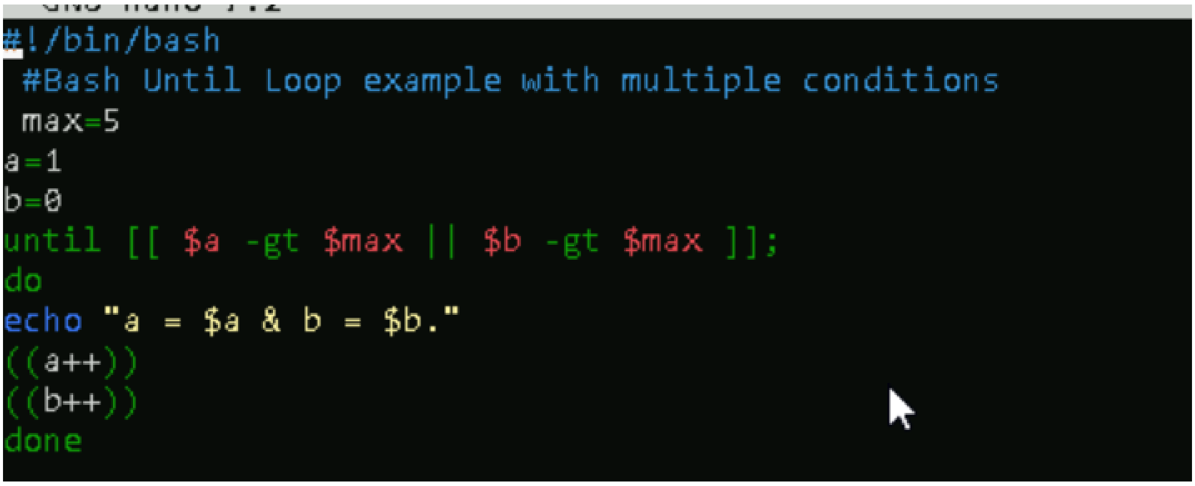
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./until1.sh
1
2
3
4
5
6
7
8
9
10
kirthik@9176994b7e94573:~/assignment/forloop$ nano until1.sh
```

CREATING FILE:



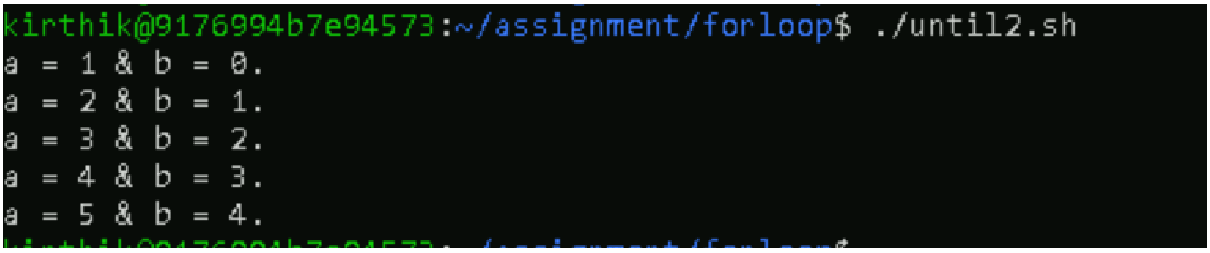
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano until1.sh
kirthik@9176994b7e94573:~/assignment/forloop$ nano until2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x until2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./until2.sh
```

SCRIPT:



```
  GNU nano 7.2
#!/bin/bash
 #Bash Until Loop example with multiple conditions
 max=5
a=1
b=0
until [[ $a -gt $max || $b -gt $max ]];
do
echo "a = $a & b = $b."
((a++))
((b++))
done
```

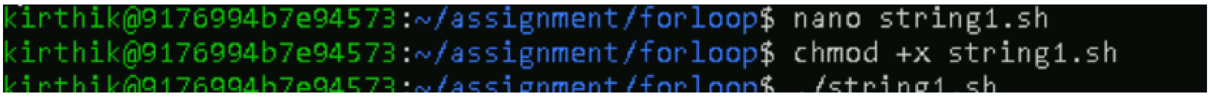
OUTPUT:



```
kirthik@9176994b7e94573:~/assignment/forloop$ ./until2.sh
a = 1 & b = 0.
a = 2 & b = 1.
a = 3 & b = 2.
a = 4 & b = 3.
a = 5 & b = 4.
kirthik@9176994b7e94573:~/assignment/forloop$
```

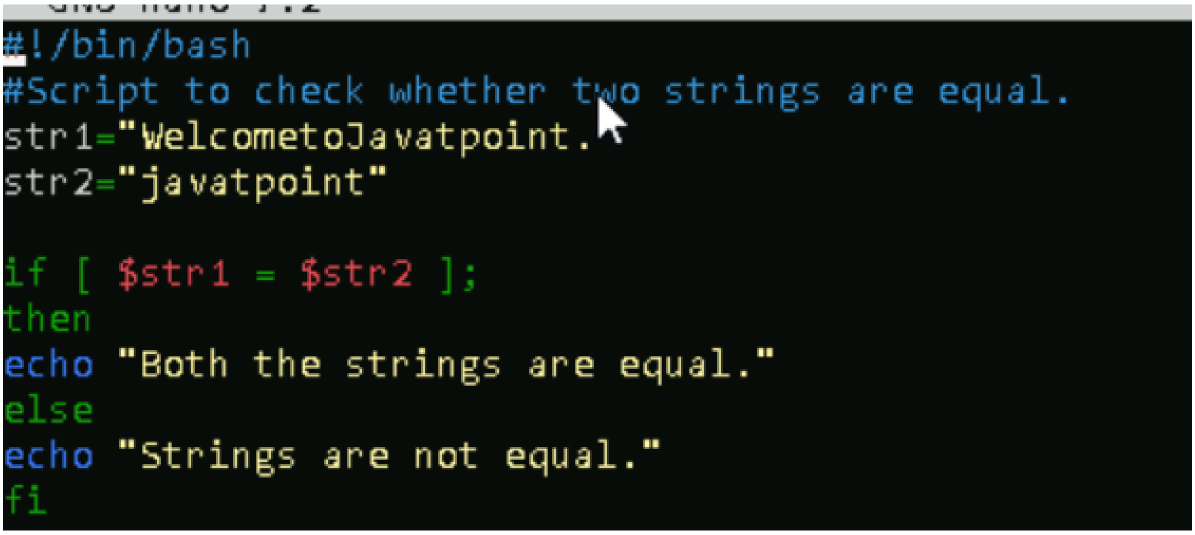
STRING:

CREATING FILE:



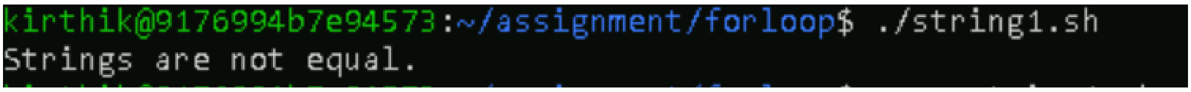
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano string1.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x string1.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./string1.sh
```

SCRIPT:



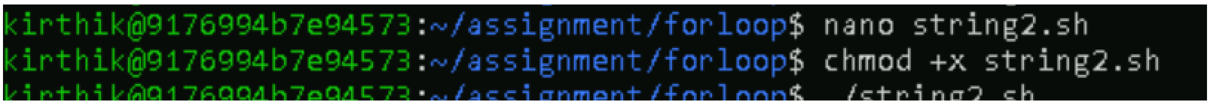
```
#!/bin/bash
#Script to check whether two strings are equal.
str1="WelcometoJavatpoint."
str2="javatpoint"

if [ $str1 = $str2 ];
then
echo "Both the strings are equal."
else
echo "Strings are not equal."
fi
```

OUTPUT:



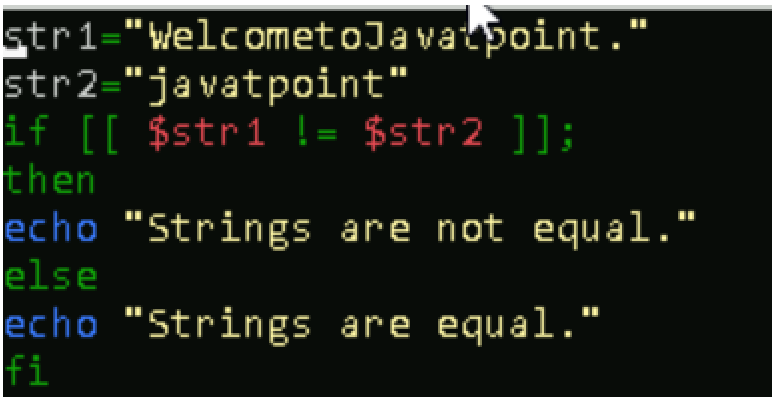
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./string1.sh
Strings are not equal.
```

CREATING FILE:



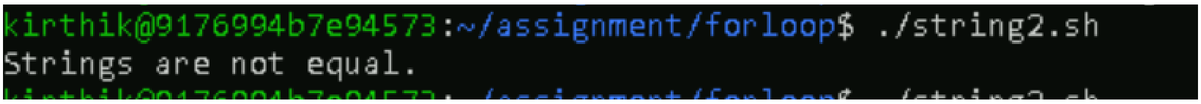
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano string2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x string2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./string2.sh
```

SCRIPT:



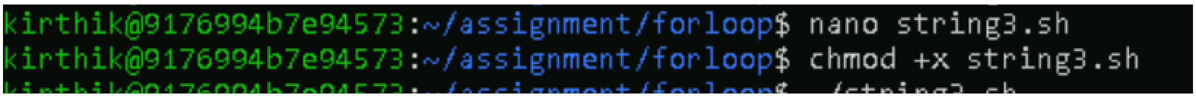
```
str1="WelcometoJavatpoint."
str2="javatpoint"
if [[ $str1 != $str2 ]];
then
echo "Strings are not equal."
else
echo "Strings are equal."
fi
```

OUTPUT:



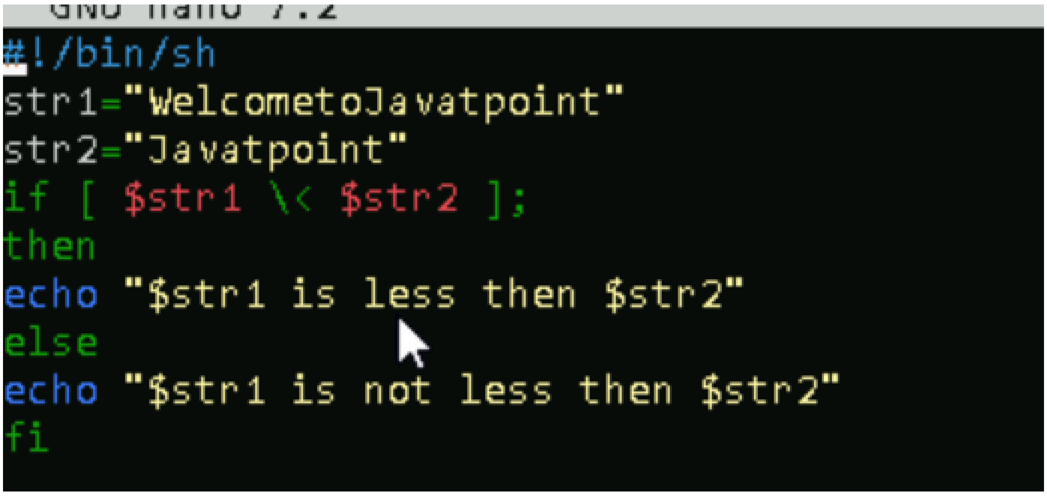
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./string2.sh
Strings are not equal.
kirthik@9176994b7e94573:~/assignment/forloop$ ./string2.sh
```

CREATING FILE:



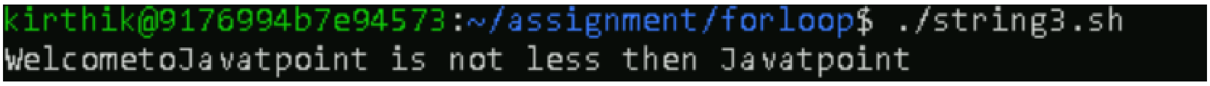
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano string3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x string3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./string3.sh
```

SCRIPT:



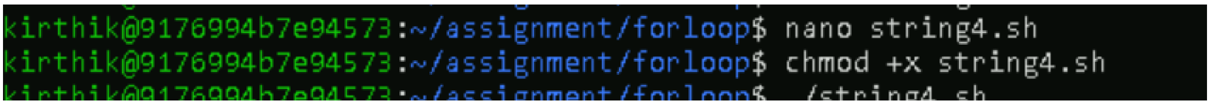
```
  GNU nano 7.2
#!/bin/sh
str1="WelcometoJavatpoint"
str2="Javatpoint"
if [ $str1 \< $str2 ];
then
echo "$str1 is less then $str2"
else
echo "$str1 is not less then $str2"
fi
```

OUTPUT:



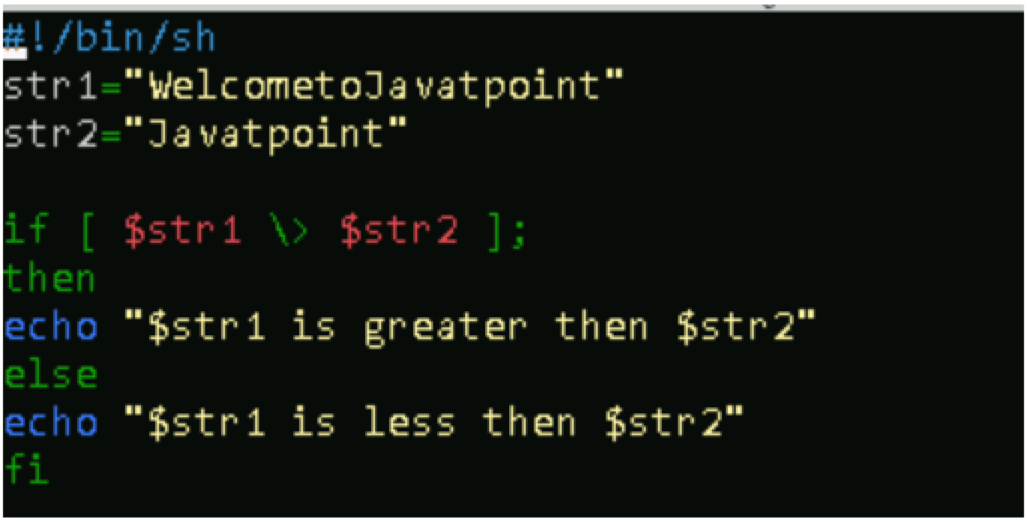
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./string3.sh
WelcometoJavatpoint is not less then Javatpoint
```

CREATING FILE:



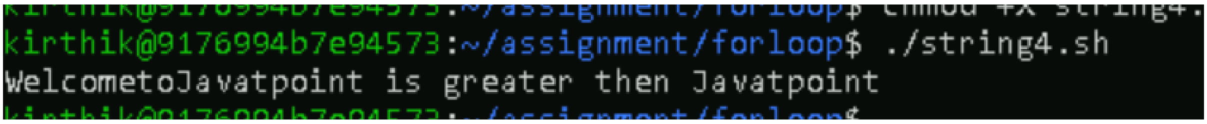
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano string4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x string4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./string4.sh
```

SCRIPT:



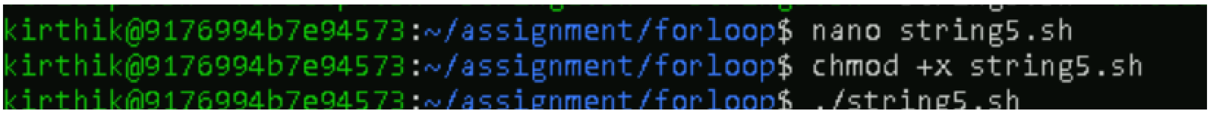
```
#!/bin/sh
str1="WelcometoJavatpoint"
str2="Javatpoint"

if [ $str1 \> $str2 ];
then
echo "$str1 is greater then $str2"
else
echo "$str1 is less then $str2"
fi
```

OUTPUT:



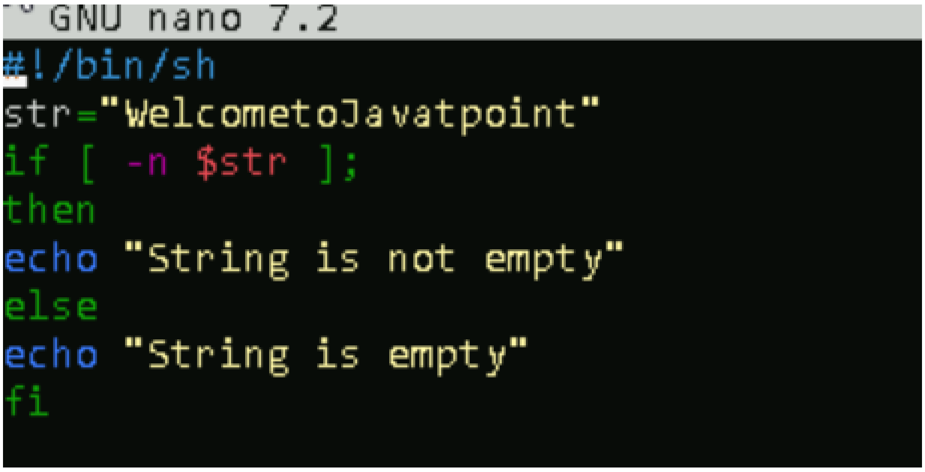
```
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x string4.
kirthik@9176994b7e94573:~/assignment/forloop$ ./string4.sh
WelcometoJavatpoint is greater then Javatpoint
kirthik@9176994b7e94573:~/assignment/forloop$
```

CREATING FILE:



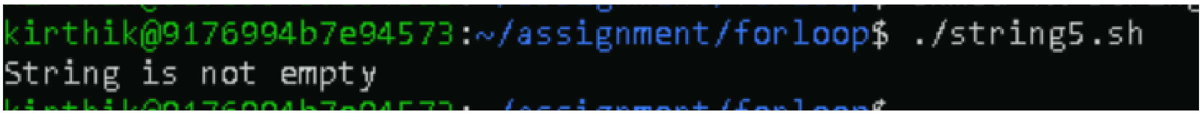
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano string5.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x string5.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./string5.sh
```

SCRIPT:



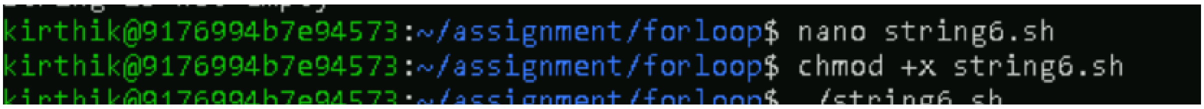
```
GNU nano 7.2
#!/bin/sh
str="WelcometoJavatpoint"
if [ -n $str ];
then
echo "String is not empty"
else
echo "String is empty"
fi
```

OUTPUT:



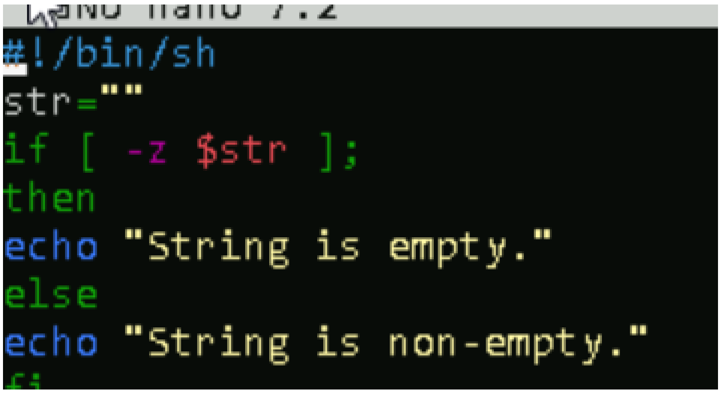
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./string5.sh
String is not empty
kirthik@9176994b7e94573:~/assignment/forloop$
```

CREATING FILE:



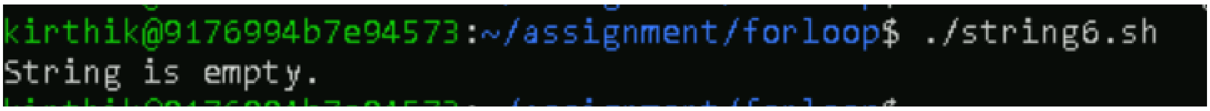
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano string6.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x string6.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./string6.sh
```

SCRIPT:



```
GNU nano 7.2
#!/bin/sh
str=""
if [ -z $str ];
then
echo "String is empty."
else
echo "String is non-empty."
fi
```

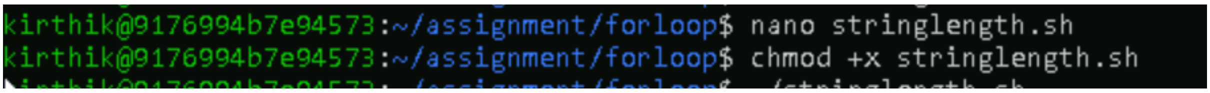
OUTPUT:



```
kirthik@9176994b7e94573:~/assignment/forloop$ ./string6.sh
String is empty.
kirthik@9176994b7e94573:~/assignment/forloop$
```

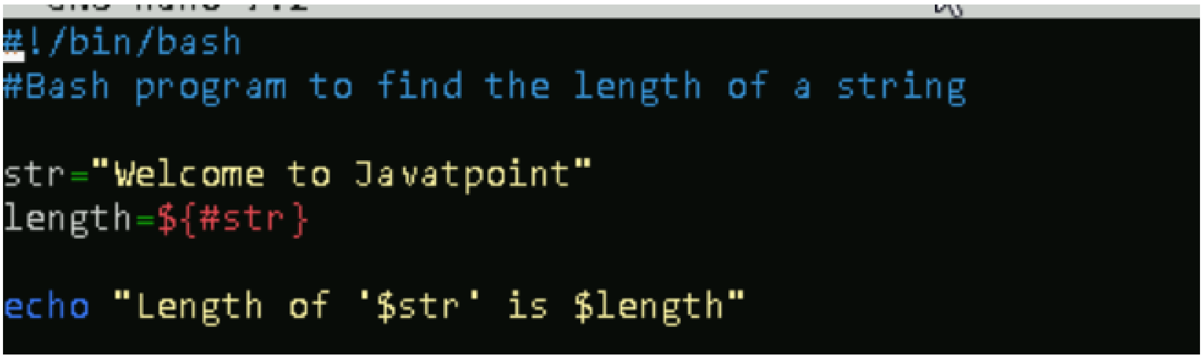
STRINGLENGTH:

CREATING FILE:



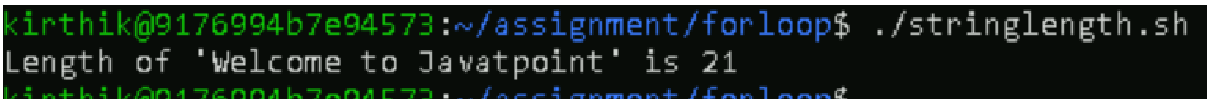
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano stringlength.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x stringlength.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringlength.sh
```

SCRIPT:



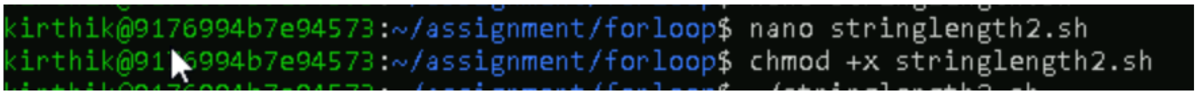
```
  GNU nano 7.2
#!/bin/bash
#Bash program to find the length of a string

str="Welcome to Javatpoint"
length=${#str}

echo "Length of '$str' is $length"
```

OUTPUT:



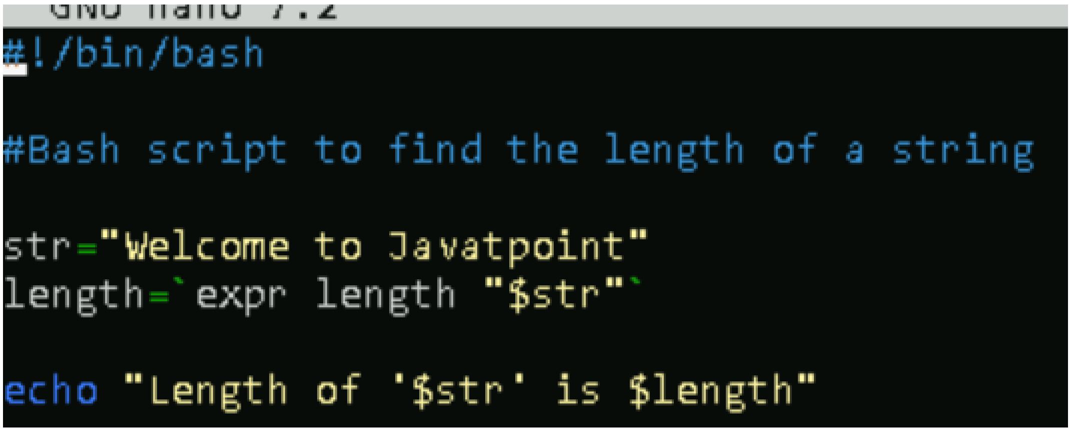
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringlength.sh
Length of 'Welcome to Javatpoint' is 21
kirthik@9176994b7e94573:~/assignment/forloop$
```

CREATING FILE:



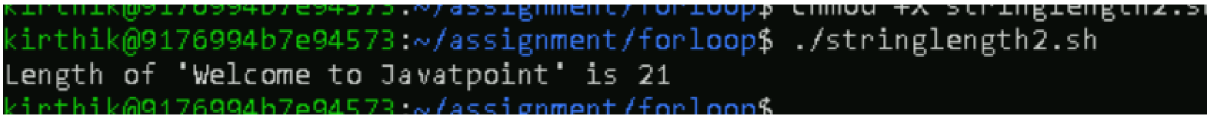
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano stringlength2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x stringlength2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringlength2.sh
```

SCRIPT:



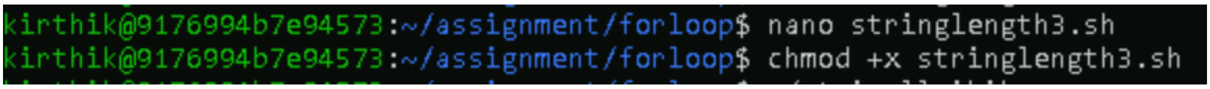
```
  GNU nano 7.2
#!/bin/bash

#Bash script to find the length of a string

str="Welcome to Javatpoint"
length=`expr length "$str"`

echo "Length of '$str' is $length"
```

OUTPUT:



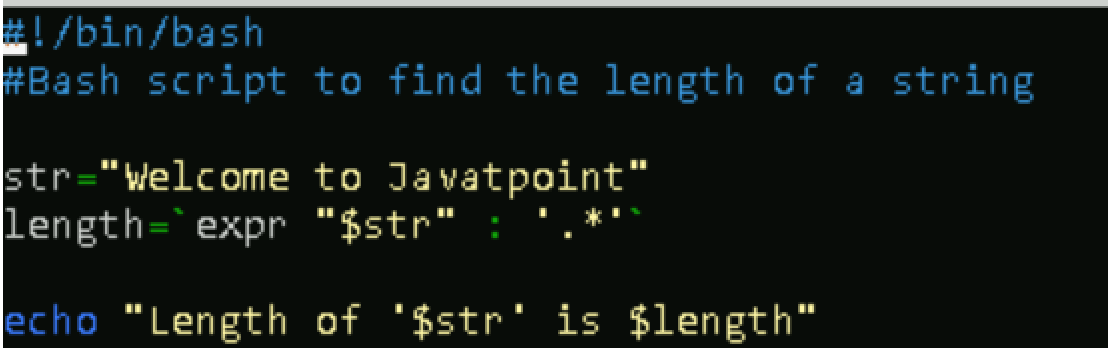
```
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x stringlength2.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringlength2.sh
Length of 'Welcome to Javatpoint' is 21
kirthik@9176994b7e94573:~/assignment/forloop$
```

CREATING FILE:



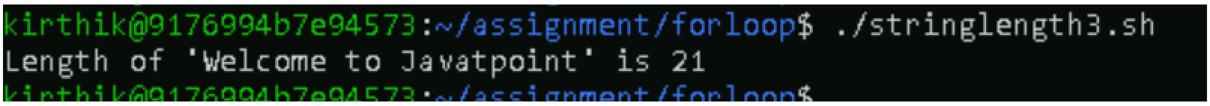
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano stringlength3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x stringlength3.sh
```

SCRIPT:



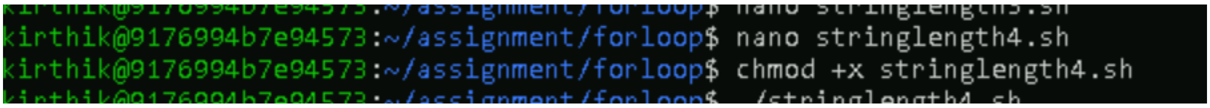
```
#!/bin/bash
#Bash script to find the length of a string

str="Welcome to Javatpoint"
length=`expr "$str" : '.*'`

echo "Length of '$str' is $length"
```

OUTPUT:



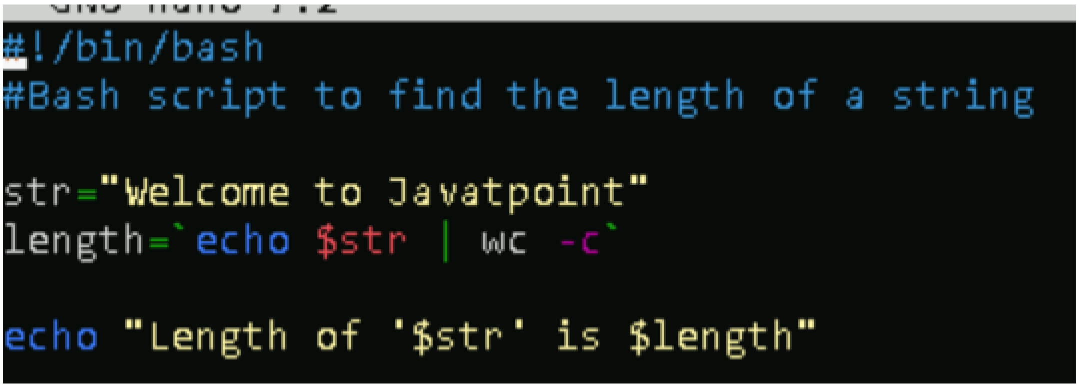
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringlength3.sh
Length of 'Welcome to Javatpoint' is 21
kirthik@9176994b7e94573:~/assignment/forloop$
```

CREATING FILE:



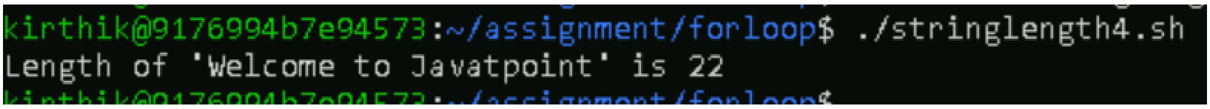
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano stringlength3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ nano stringlength4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x stringlength4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringlength4.sh
```

SCRIPT:



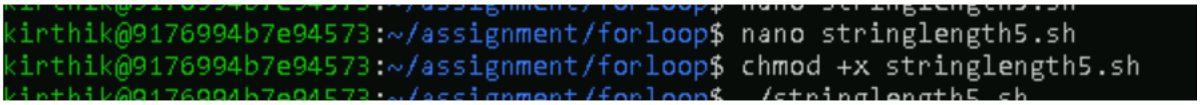
```
GNU nano 7.2
#!/bin/bash
#Bash script to find the length of a string

str="Welcome to Javatpoint"
length=`echo $str | wc -c`

echo "Length of '$str' is $length"
```

OUTPUT:



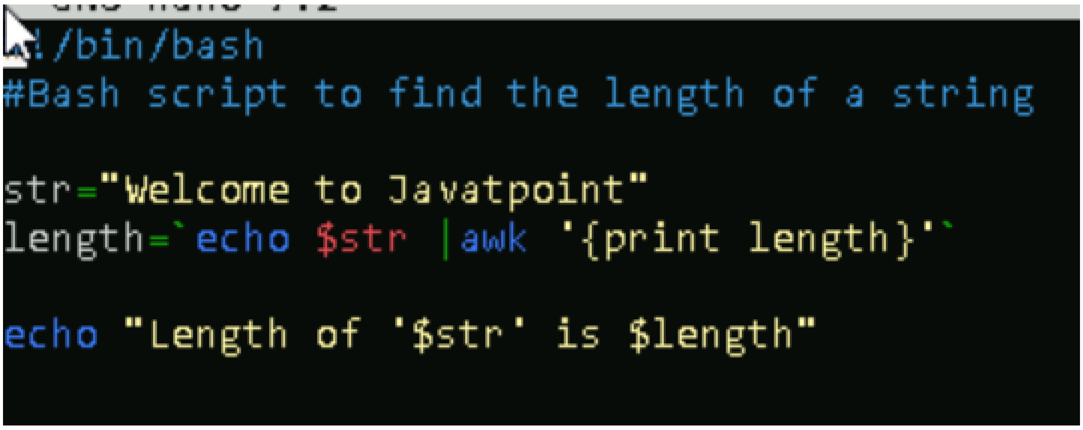
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringlength4.sh
Length of 'Welcome to Javatpoint' is 22
kirthik@9176994b7e94573:~/assignment/forloop$
```

CREATING FILE:



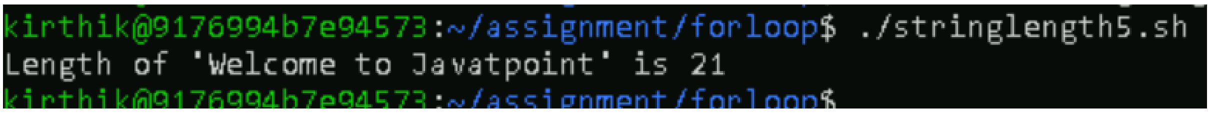
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano stringlength5.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x stringlength5.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringlength5.sh
```

SCRIPT:



```
#!/bin/bash
#Bash script to find the length of a string

str="Welcome to Javatpoint"
length=`echo $str |awk '{print length}'`

echo "Length of '$str' is $length"
```

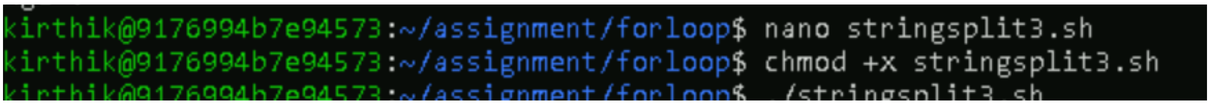
OUTPUT:



```
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringlength5.sh
Length of 'Welcome to Javatpoint' is 21
kirthik@9176994b7e94573:~/assignment/forloop$
```

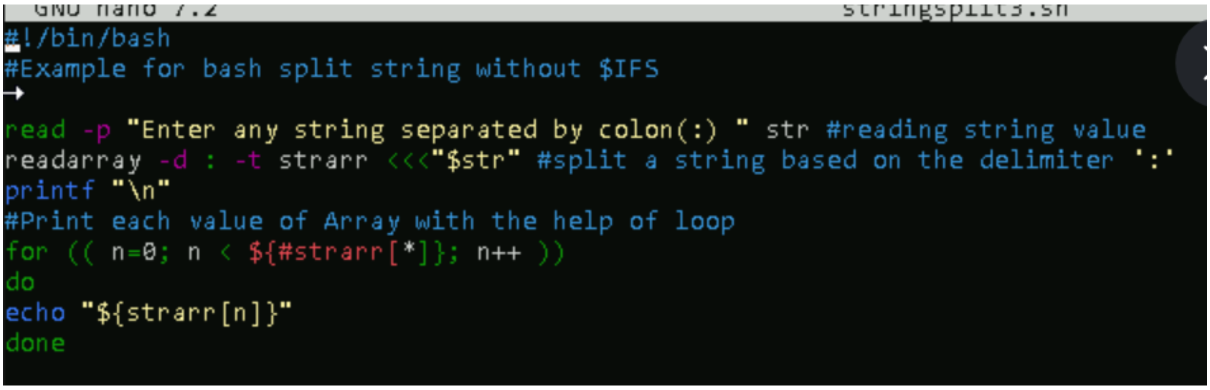
STRINGSPLIT:

CREATING FILE:



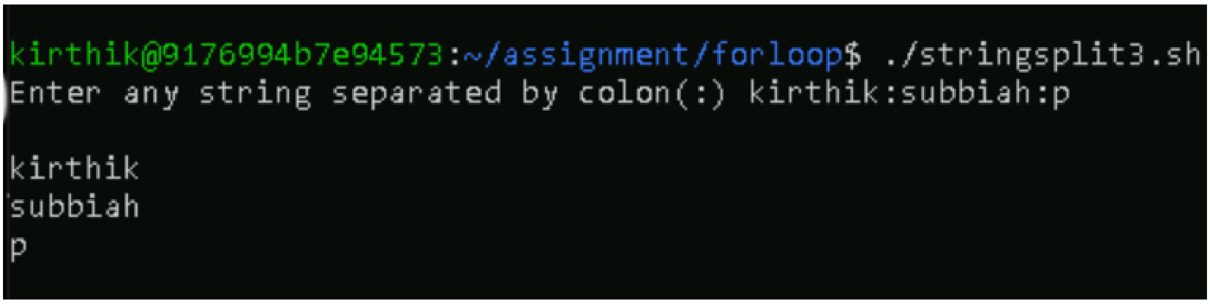
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano stringsplit3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x stringsplit3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringsplit3.sh
```

SCRIPT:



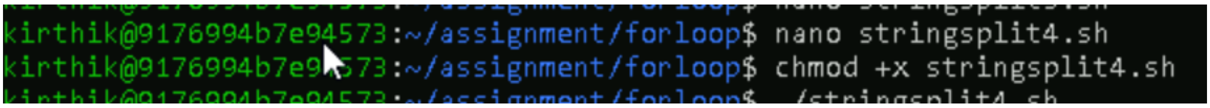
```
  GNU nano 7.2                                  stringsplit3.sh
#!/bin/bash
#Example for bash split string without $IFS

read -p "Enter any string separated by colon(:) " str #reading string value
readarray -d : -t strarr <<<"$str" #split a string based on the delimiter ':'
printf "\n"
#Print each value of Array with the help of loop
for (( n=0; n < ${#strarr[*]}; n++ ))
do
echo "${strarr[n]}"
done
```

OUTPUT:



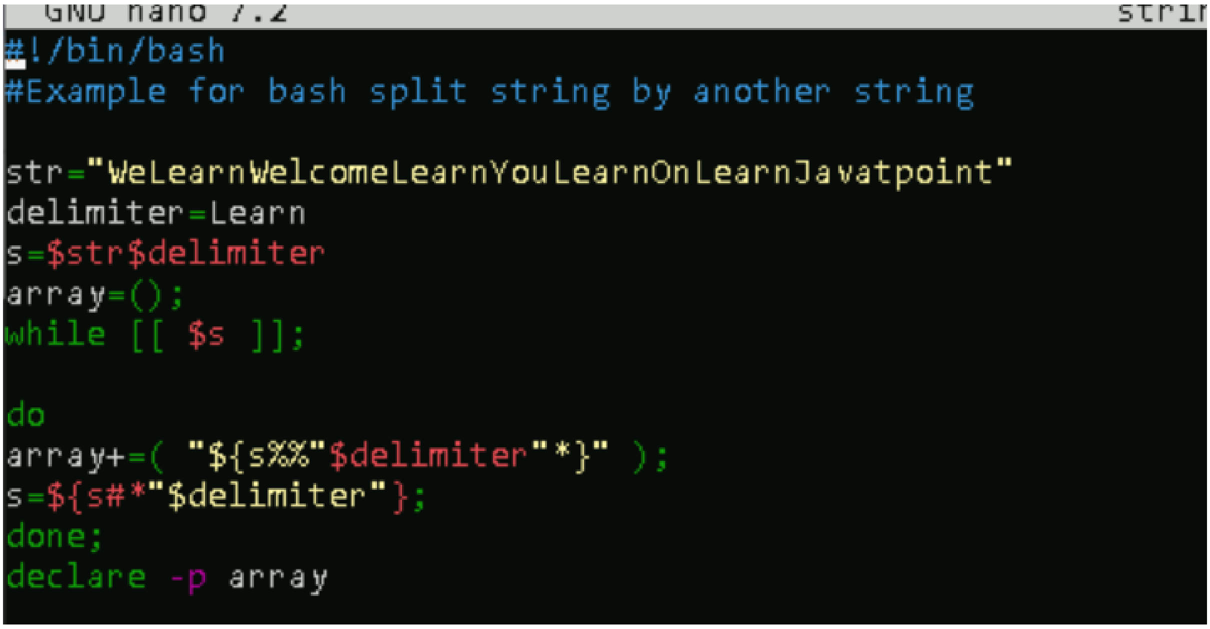
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringsplit3.sh
Enter any string separated by colon(:) kirthik:subbiah:p

kirthik
subbiah
p
```

CREATING FILE:



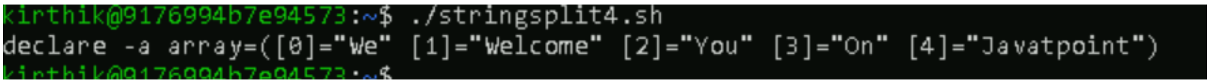
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano stringsplit3.sh
kirthik@9176994b7e94573:~/assignment/forloop$ nano stringsplit4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x stringsplit4.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./stringsplit4.sh
```

SCRIPT:



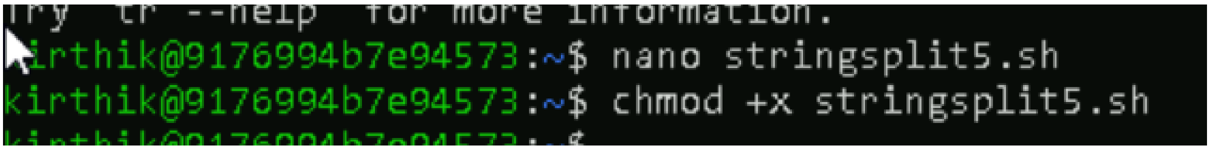
```
  GNU nano 7.2                                                    strin
#!/bin/bash
#Example for bash split string by another string

str="WeLearnWelcomeLearnYouLearnOnLearnJavatpoint"
delimiter=Learn
s=$str$delimiter
array=();
while [[ $s ]];

do
array+=( "${s%%"$delimiter"*}" );
s=${s#*"$delimiter"};
done;
declare -p array
```

OUTPUT:



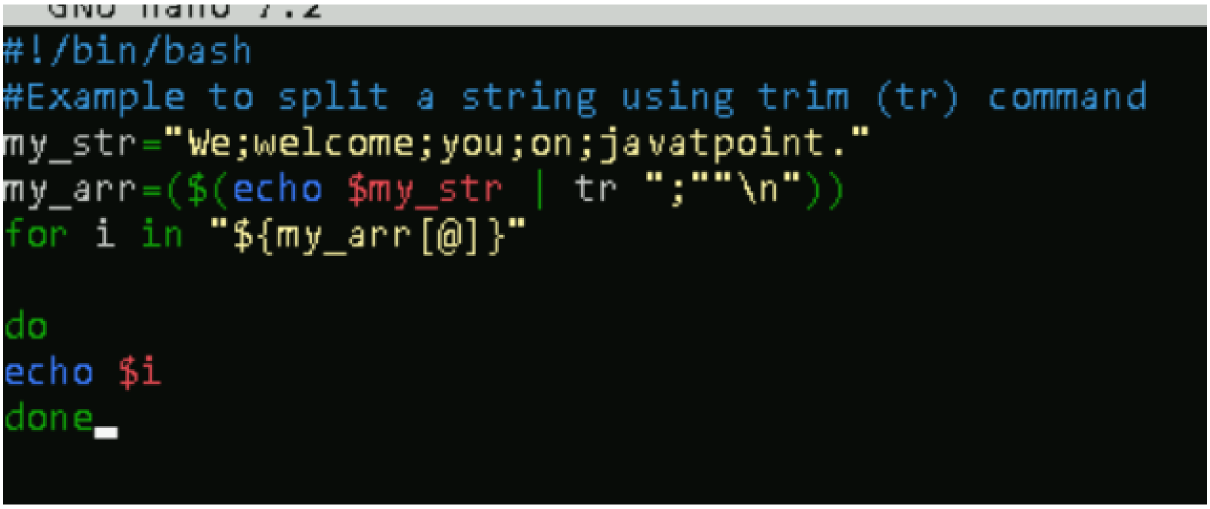
```
kirthik@9176994b7e94573:~$ ./stringsplit4.sh
declare -a array=([0]="We" [1]="Welcome" [2]="You" [3]="On" [4]="Javatpoint")
kirthik@9176994b7e94573:~$
```

CREATING FILE:



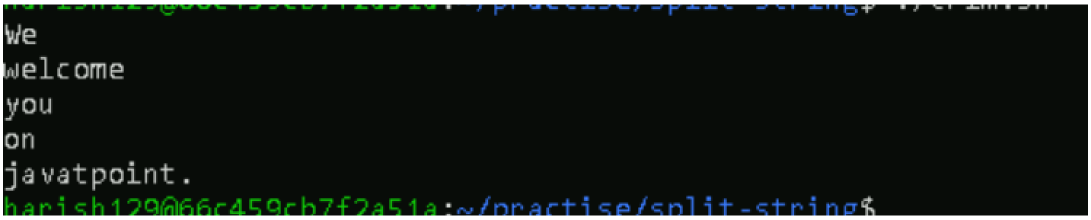
```
Try  tr --help  for more information.
kirthik@9176994b7e94573:~$ nano stringsplit5.sh
kirthik@9176994b7e94573:~$ chmod +x stringsplit5.sh
kirthik@9176994b7e94573:~$
```

SCRIPT:



```
  GNU nano 7.2
#!/bin/bash
#Example to split a string using trim (tr) command
my_str="We;welcome;you;on;javatpoint."
my_arr=($(echo $my_str | tr ";""\n"))
for i in "${my_arr[@]}"

do
echo $i
done
```

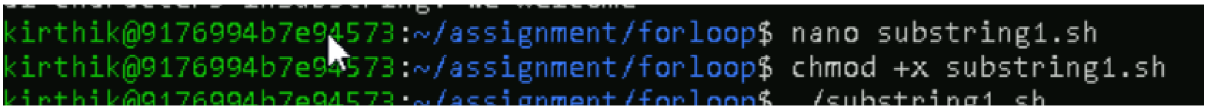
OUTPUT:



```
harish129@66c459cb7f2a51a:~/practise/split-string$ ./trim.sh
We
welcome
you
on
javatpoint.
harish129@66c459cb7f2a51a:~/practise/split-string$
```

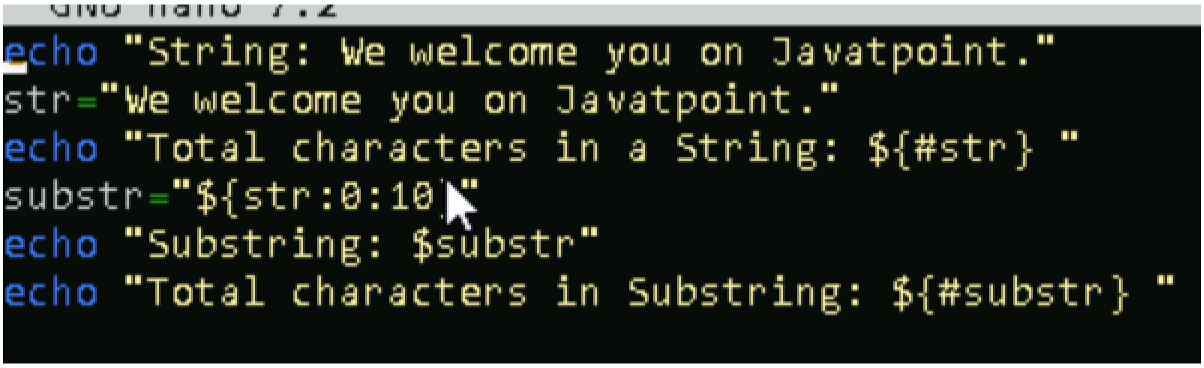
SUBSTRINGS:

CREATING FILE:



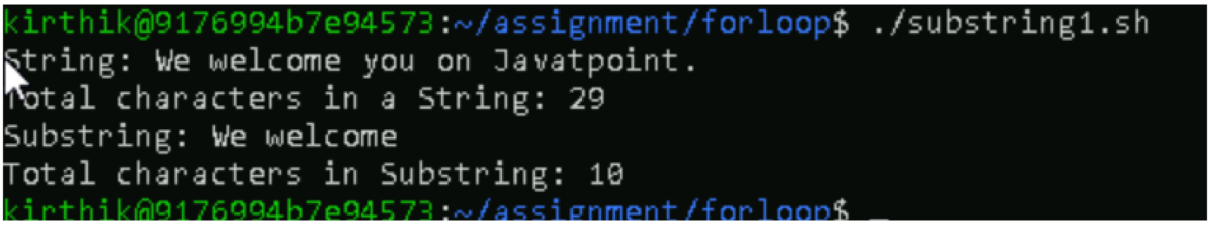
```
kirthik@9176994b7e94573:~/assignment/forloop$ nano substring1.sh
kirthik@9176994b7e94573:~/assignment/forloop$ chmod +x substring1.sh
kirthik@9176994b7e94573:~/assignment/forloop$ ./substring1.sh
```

SCRIPT:



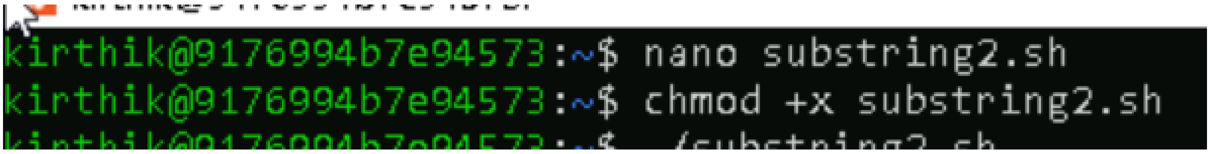
```
  GNU nano 7.2
echo "String: We welcome you on Javatpoint."
str="We welcome you on Javatpoint."
echo "Total characters in a String: ${#str} "
substr="${str:0:10}"
echo "Substring: $substr"
echo "Total characters in Substring: ${#substr} "
```

OUTPUT:



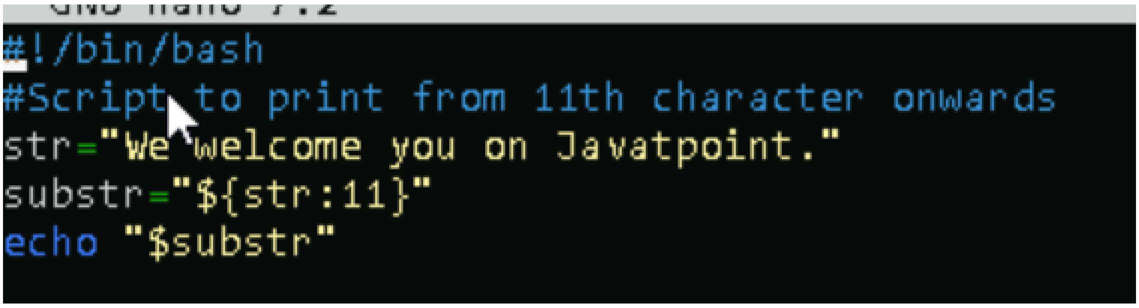
```
kirthik@9176994b7e94573:~/assignment/forloop$ ./substring1.sh
String: We welcome you on Javatpoint.
Total characters in a String: 29
Substring: We welcome
Total characters in Substring: 10
kirthik@9176994b7e94573:~/assignment/forloop$ _
```

CREATING FILE:



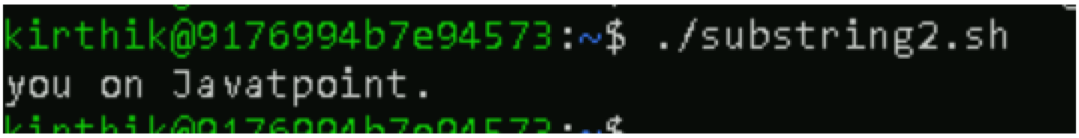
```
kirthik@9176994b7e94573:~$ nano substring2.sh
kirthik@9176994b7e94573:~$ chmod +x substring2.sh
kirthik@9176994b7e94573:~$ ./substring2.sh
```

SCRIPT:



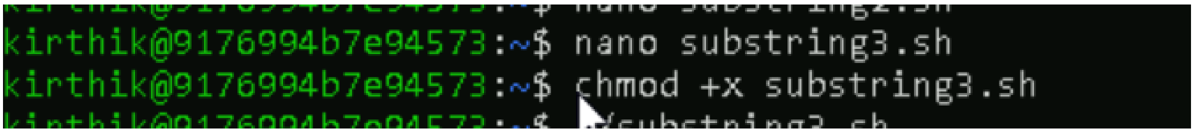
```
GNU nano 7.2
#!/bin/bash
#Script to print from 11th character onwards
str="We welcome you on Javatpoint."
substr="${str:11}"
echo "$substr"
```

OUTPUT:



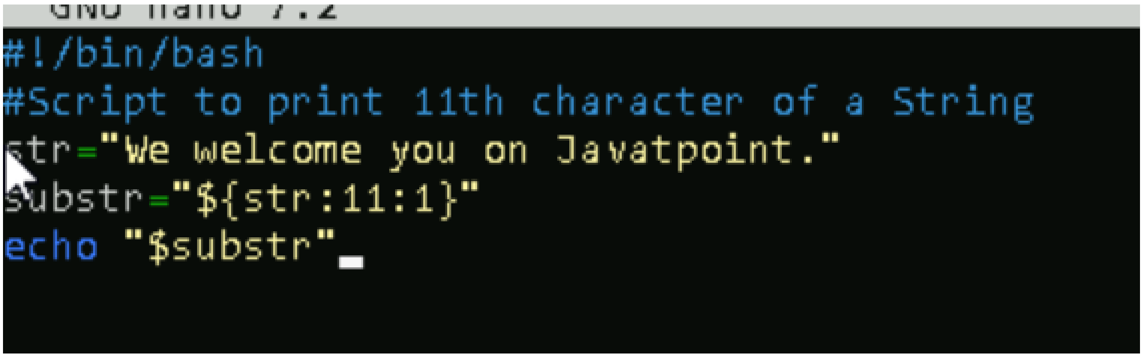
```
kirthik@9176994b7e94573:~$ ./substring2.sh
you on Javatpoint.
kirthik@9176994b7e94573:~$
```

CREATING FILE:



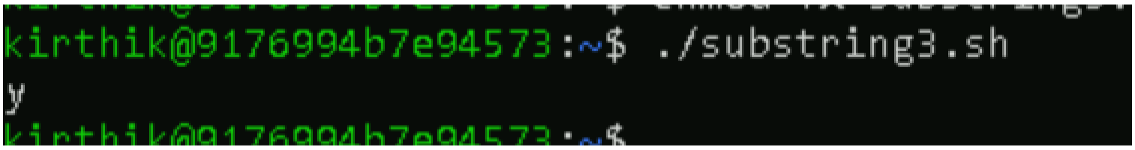
```
kirthik@9176994b7e94573:~$ nano substring2.sh
kirthik@9176994b7e94573:~$ nano substring3.sh
kirthik@9176994b7e94573:~$ chmod +x substring3.sh
kirthik@9176994b7e94573:~$ ./substring3.sh
```

SCRIPT:



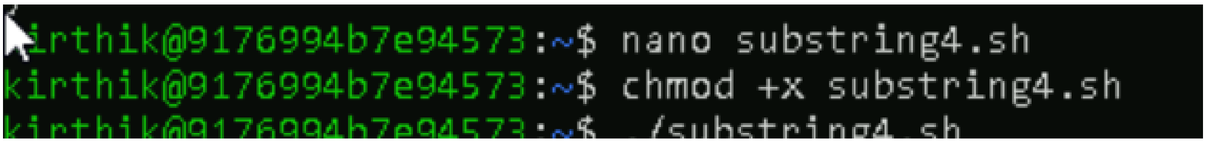
```
  GNU nano 7.2
#!/bin/bash
#Script to print 11th character of a String
str="We welcome you on Javatpoint."
substr="${str:11:1}"
echo "$substr"
```

OUTPUT:



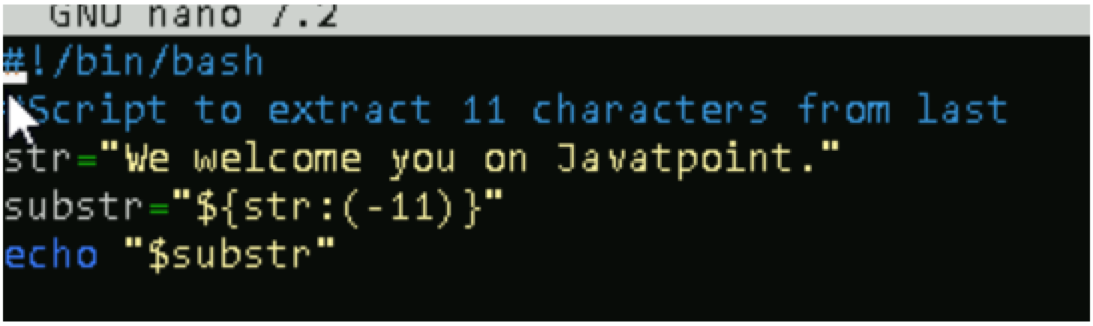
```
kirthik@9176994b7e94573:~$ chmod +x substring3.sh
kirthik@9176994b7e94573:~$ ./substring3.sh
y
kirthik@9176994b7e94573:~$
```

CREATING FILE:



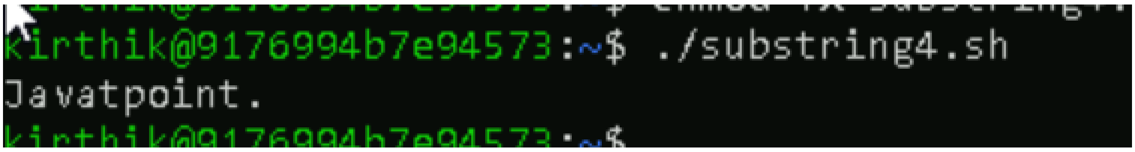
```
kirthik@9176994b7e94573:~$ nano substring4.sh
kirthik@9176994b7e94573:~$ chmod +x substring4.sh
kirthik@9176994b7e94573:~$ ./substring4.sh
```

SCRIPT:



```
  GNU nano 7.2
#!/bin/bash
#Script to extract 11 characters from last
str="We welcome you on Javatpoint."
substr="${str:(-11)}"
echo "$substr"
```

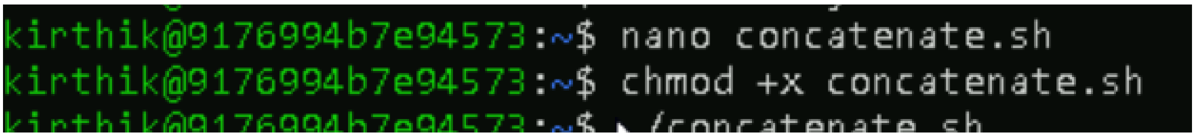
OUTPUT:



```
kirthik@9176994b7e94573:~$ chmod +x substring4.sh
kirthik@9176994b7e94573:~$ ./substring4.sh
Javatpoint.
kirthik@9176994b7e94573:~$
```

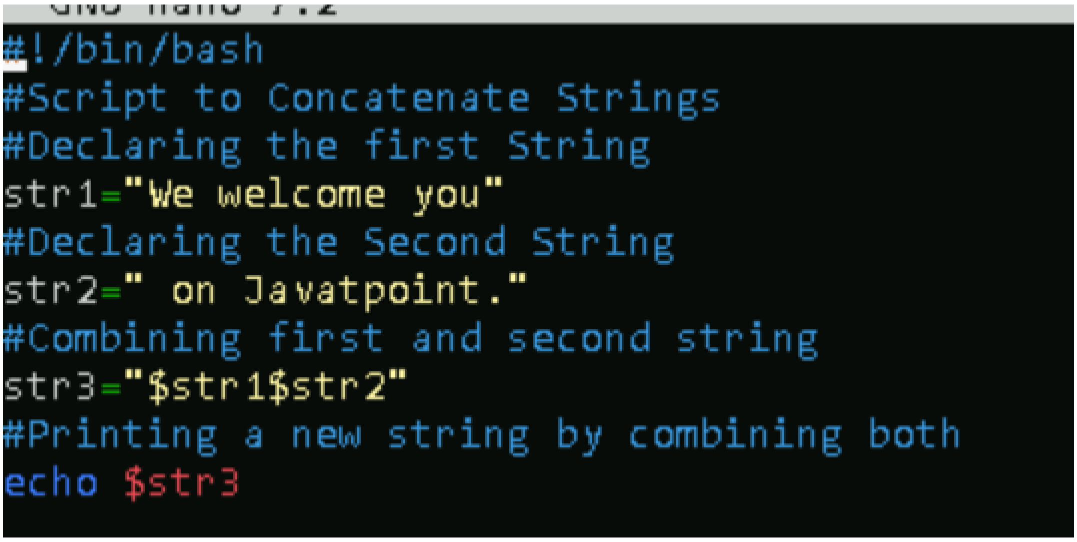
CONCATENATE

CREATING FILE:



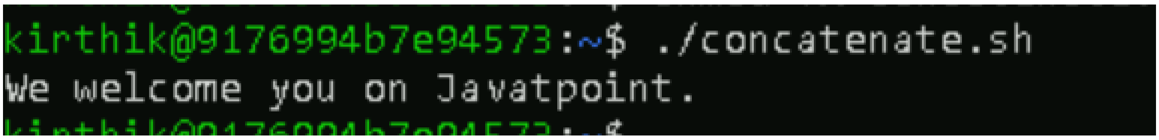
```
kirthik@9176994b7e94573:~$ nano concatenate.sh
kirthik@9176994b7e94573:~$ chmod +x concatenate.sh
kirthik@9176994b7e94573:~$ ./concatenate.sh
```

SCRIPT:



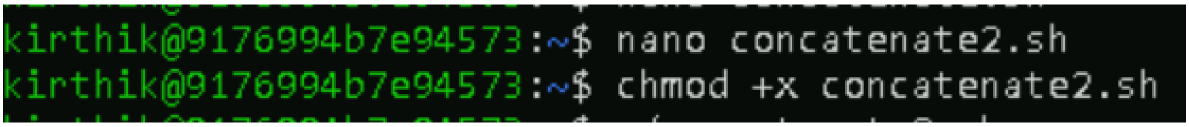
```
  GNU nano 7.2
#!/bin/bash
#Script to Concatenate Strings
#Declaring the first String
str1="We welcome you"
#Declaring the Second String
str2=" on Javatpoint."
#Combining first and second string
str3="$str1$str2"
#Printing a new string by combining both
echo $str3
```

OUTPUT:



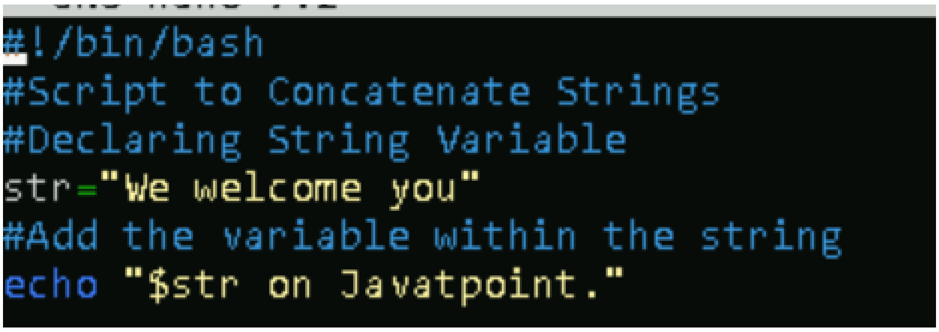
```
kirthik@9176994b7e94573:~$ ./concatenate.sh
We welcome you on Javatpoint.
kirthik@9176994b7e94573:~$
```

CREATING FILE:



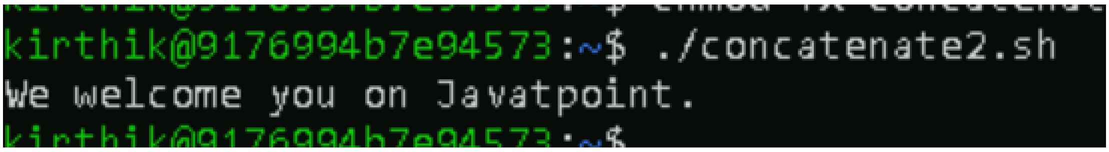
```
kirthik@9176994b7e94573:~$ nano concatenate2.sh
kirthik@9176994b7e94573:~$ chmod +x concatenate2.sh
```

SCRIPT:



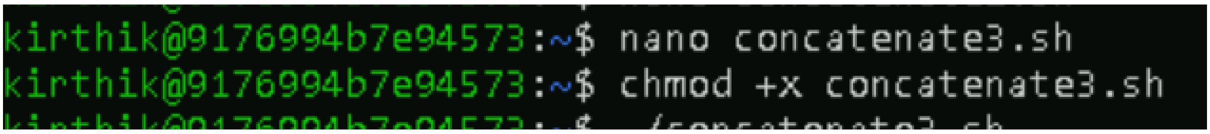
```
#!/bin/bash
#Script to Concatenate Strings
#Declaring String Variable
str="We welcome you"
#Add the variable within the string
echo "$str on Javatpoint."
```

OUTPUT:



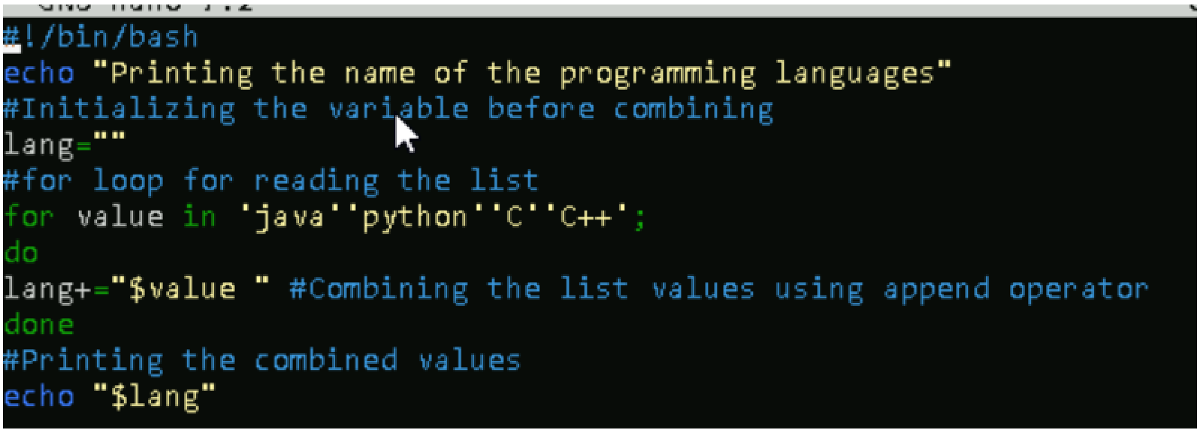
```
kirthik@9176994b7e94573:~$ ./concatenate2.sh
We welcome you on Javatpoint.
kirthik@9176994b7e94573:~$
```

CREATING FILE:



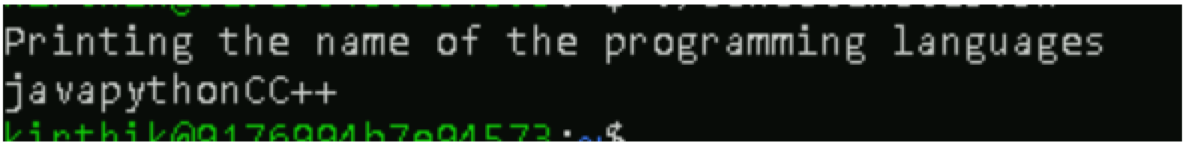
```
kirthik@9176994b7e94573:~$ nano concatenate3.sh
kirthik@9176994b7e94573:~$ chmod +x concatenate3.sh
kirthik@9176994b7e94573:~$ ./concatenate3.sh
```

SCRIPT:



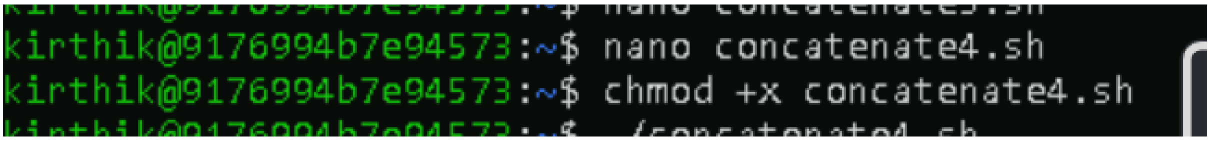
```
  GNU nano 7.2
#!/bin/bash
echo "Printing the name of the programming languages"
#Initializing the variable before combining
lang=""
#for loop for reading the list
for value in 'java''python''C''C++';
do
lang+="$value " #Combining the list values using append operator
done
#Printing the combined values
echo "$lang"
```

OUTPUT:



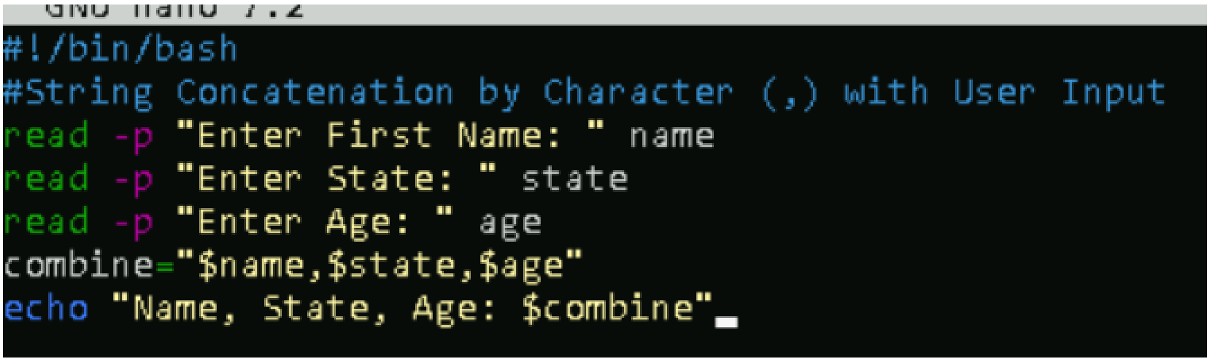
```
Printing the name of the programming languages
javapythonCC++
kirthik@9176994b7e94573:~$
```

CREATING FILE:



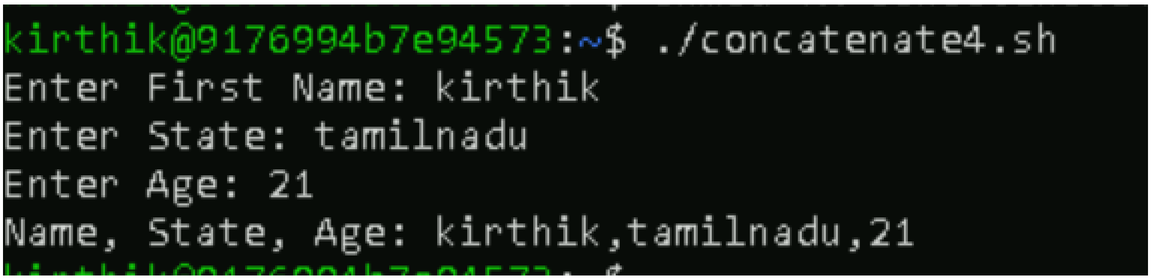
```
kirthik@9176994b7e94573:~$ nano concatenate3.sh
kirthik@9176994b7e94573:~$ nano concatenate4.sh
kirthik@9176994b7e94573:~$ chmod +x concatenate4.sh
kirthik@9176994b7e94573:~$ ./concatenate4.sh
```

SCRIPT:



```
  GNU nano 7.2
#!/bin/bash
#String Concatenation by Character (,) with User Input
read -p "Enter First Name: " name
read -p "Enter State: " state
read -p "Enter Age: " age
combine="$name,$state,$age"
echo "Name, State, Age: $combine"
```

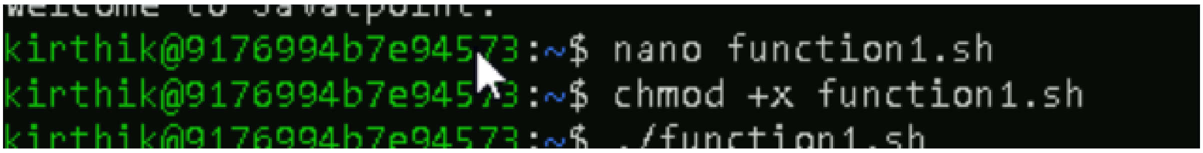
OUTPUT:



```
kirthik@9176994b7e94573:~$ ./concatenate4.sh
Enter First Name: kirthik
Enter State: tamilnadu
Enter Age: 21
Name, State, Age: kirthik,tamilnadu,21
kirthik@9176994b7e94573:~$
```

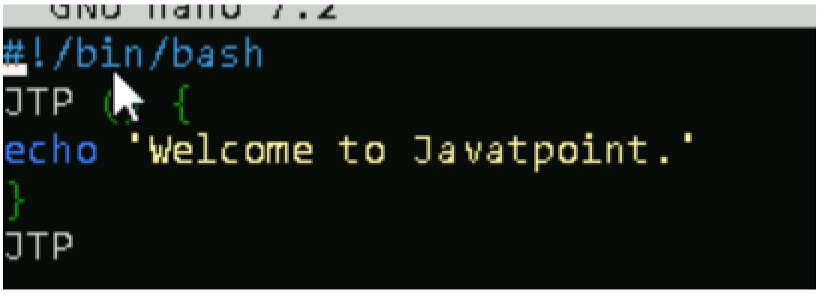
FUNCTIONS:

CREATING FILE:



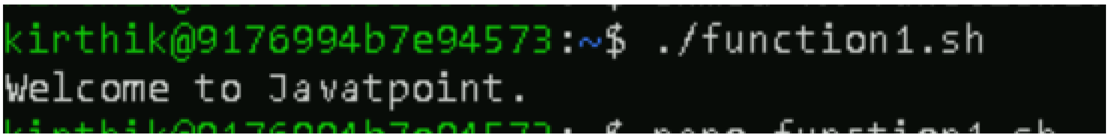
```
Welcome to Javatpoint.
kirthik@9176994b7e94573:~$ nano function1.sh
kirthik@9176994b7e94573:~$ chmod +x function1.sh
kirthik@9176994b7e94573:~$ ./function1.sh
```

SCRIPT:



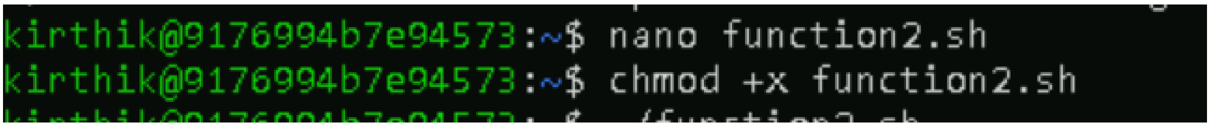
```
  GNU nano 7.2
#!/bin/bash
JTP () {
echo 'Welcome to Javatpoint.'
}
JTP
```

OUTPUT:



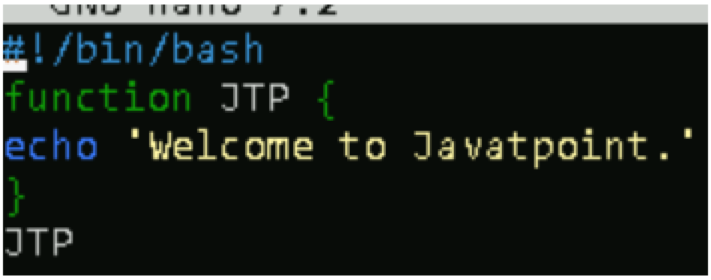
```
kirthik@9176994b7e94573:~$ ./function1.sh
Welcome to Javatpoint.
kirthik@9176994b7e94573:~$ nano function1.sh
```

CREATING FILE:



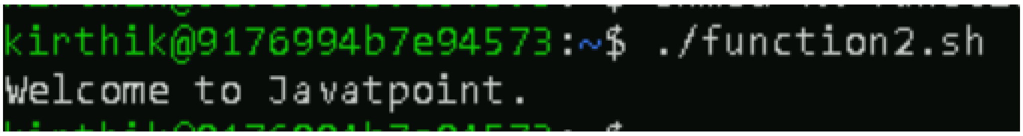
```
kirthik@9176994b7e94573:~$ nano function2.sh
kirthik@9176994b7e94573:~$ chmod +x function2.sh
kirthik@9176994b7e94573:~$ ./function2.sh
```

SCRIPT:



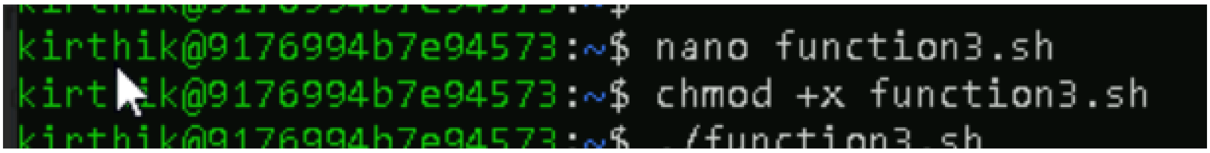
```
GNU nano 7.2
#!/bin/bash
function JTP {
echo 'Welcome to Javatpoint.'
}
JTP
```

OUTPUT:



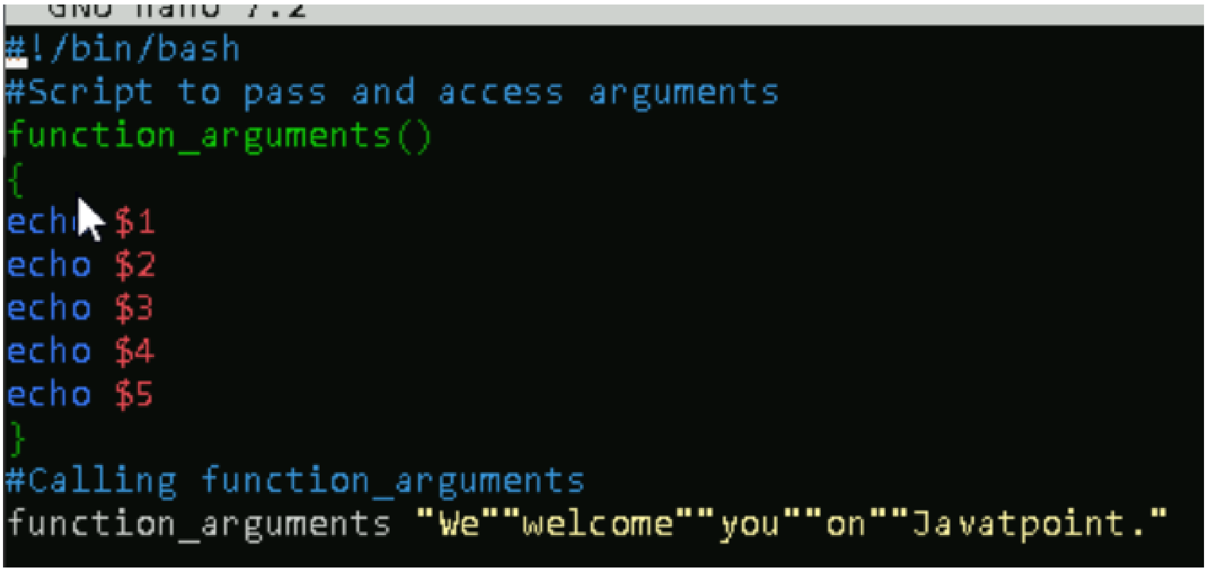
```
kirthik@9176994b7e94573:~$ chmod +x functio
kirthik@9176994b7e94573:~$ ./function2.sh
Welcome to Javatpoint.
kirthik@9176994b7e94573:~$
```

CREATING FILE:



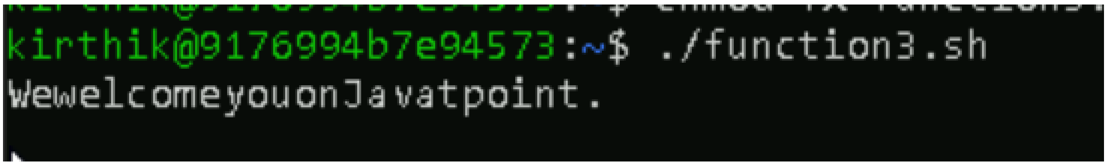
```
kirthik@9176994b7e94573:~$ nano function3.sh
kirthik@9176994b7e94573:~$ chmod +x function3.sh
kirthik@9176994b7e94573:~$ ./function3.sh
```

SCRIPT:



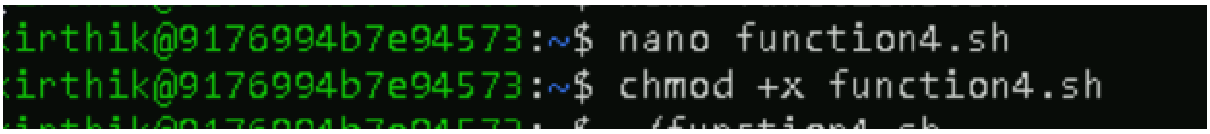
```
  GNU nano 7.2
#!/bin/bash
#Script to pass and access arguments
function_arguments()
{
echo $1
echo $2
echo $3
echo $4
echo $5
}
#Calling function_arguments
function_arguments "We""welcome""you""on""Javatpoint."
```

OUTPUT:



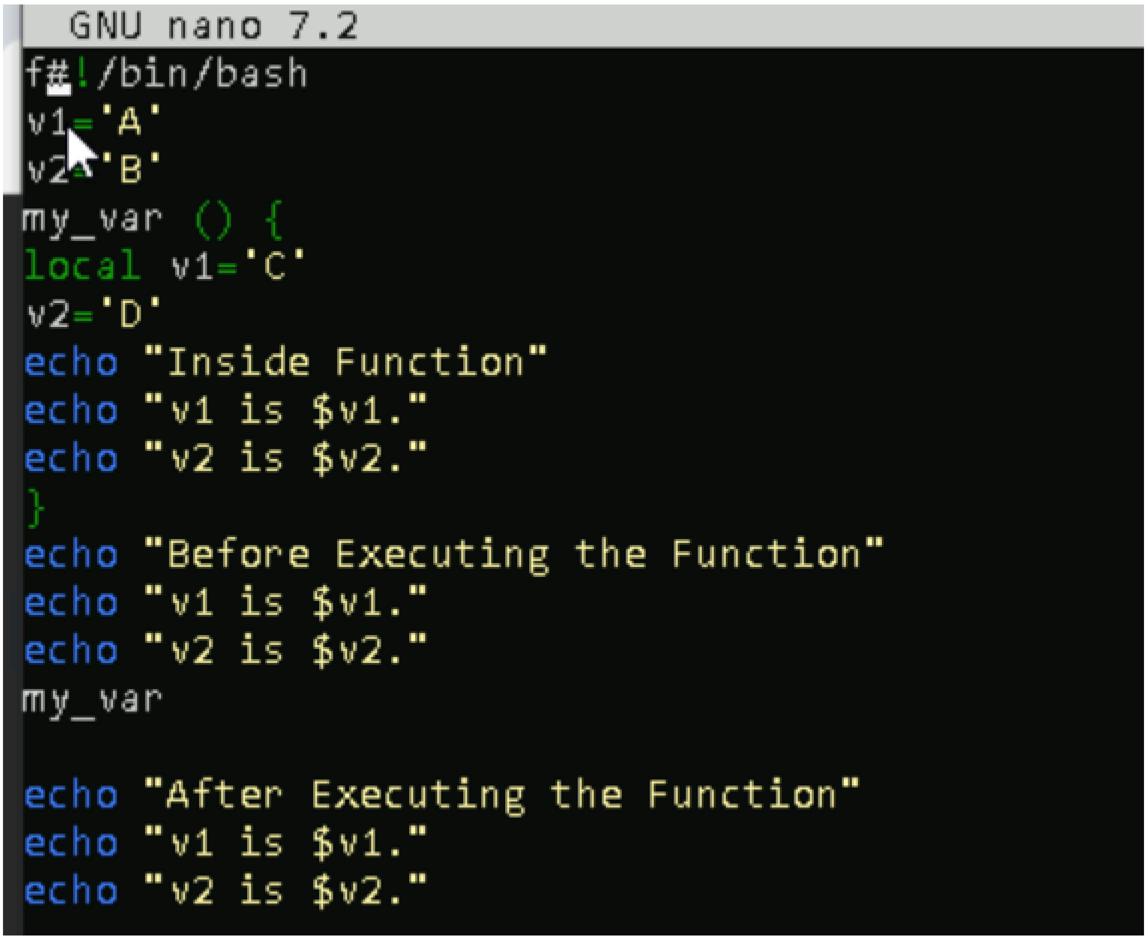
```
kirthik@9176994b7e94573:~$ ./function3.sh
WewelcomeyouonJavatpoint.
```

CREATING FILE:



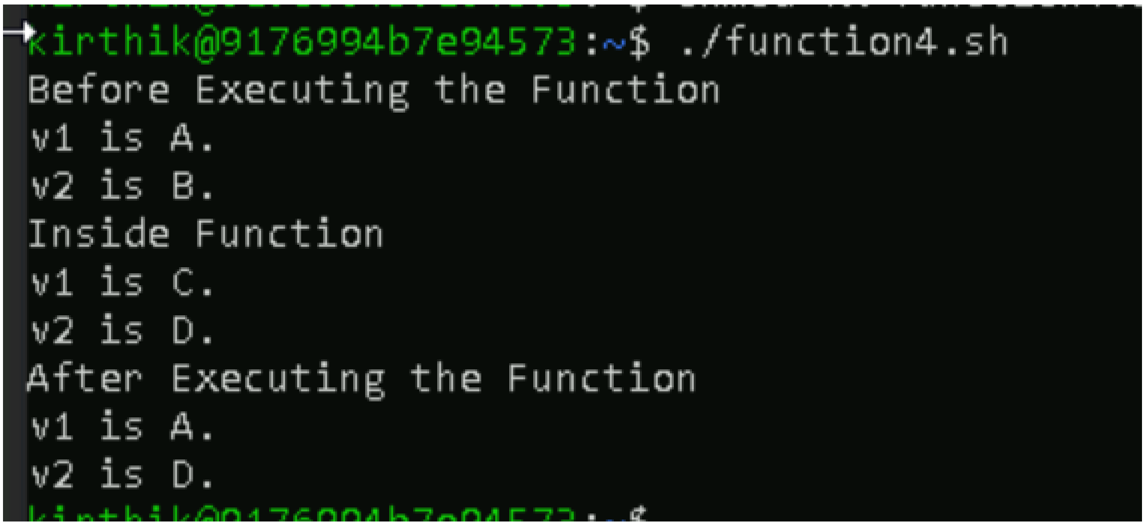
```
irthik@9176994b7e94573:~$ nano function4.sh
irthik@9176994b7e94573:~$ chmod +x function4.sh
```

SCRIPT:



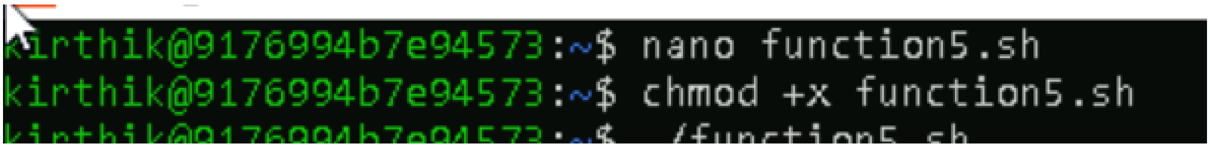
```
f#!/bin/bash
v1='A'
v2='B'
my_var () {
local v1='C'
v2='D'
echo "Inside Function"
echo "v1 is $v1."
echo "v2 is $v2."
}
echo "Before Executing the Function"
echo "v1 is $v1."
echo "v2 is $v2."
my_var

echo "After Executing the Function"
echo "v1 is $v1."
echo "v2 is $v2."
```

OUTPUT:



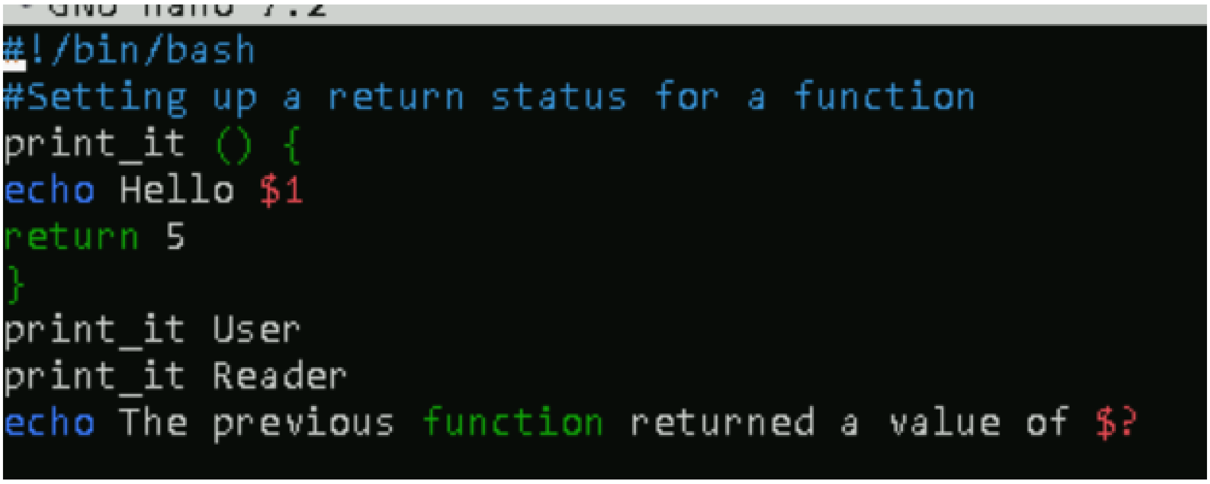
```
kirthik@9176994b7e94573:~$ ./function4.sh
Before Executing the Function
v1 is A.
v2 is B.
Inside Function
v1 is C.
v2 is D.
After Executing the Function
v1 is A.
v2 is D.
kirthik@9176994b7e94573:~$
```

CREATING FILE:



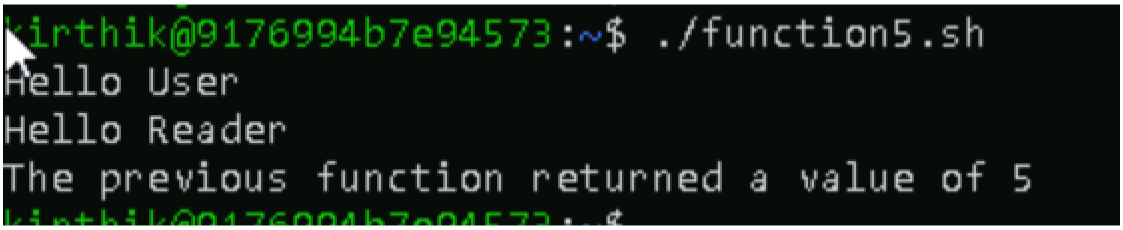
```
kirthik@9176994b7e94573:~$ nano function5.sh
kirthik@9176994b7e94573:~$ chmod +x function5.sh
kirthik@9176994b7e94573:~$ ./function5.sh
```

SCRIPT:



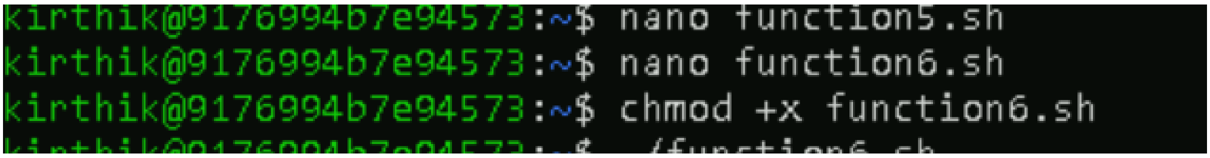
```
GNU nano 7.2
#!/bin/bash
#Setting up a return status for a function
print_it () {
echo Hello $1
return 5
}
print_it User
print_it Reader
echo The previous function returned a value of $?
```

OUTPUT:



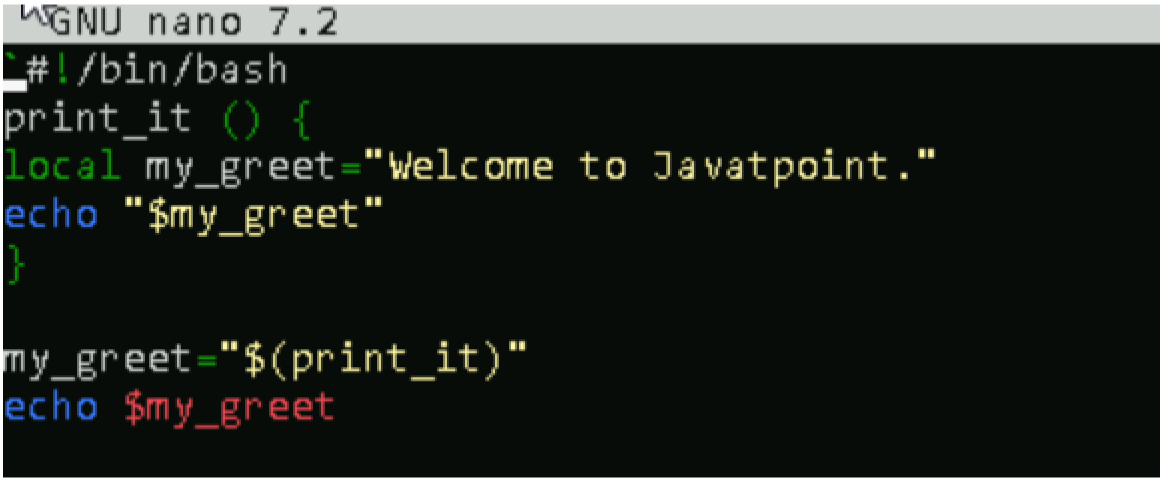
```
kirthik@9176994b7e94573:~$ ./function5.sh
Hello User
Hello Reader
The previous function returned a value of 5
kirthik@9176994b7e94573:~$
```

CREATING FILE:



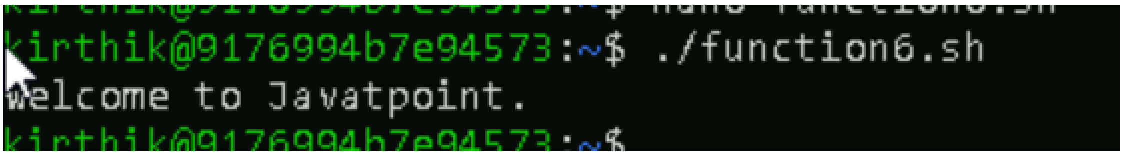
```
kirthik@9176994b7e94573:~$ nano function5.sh
kirthik@9176994b7e94573:~$ nano function6.sh
kirthik@9176994b7e94573:~$ chmod +x function6.sh
kirthik@9176994b7e94573:~$ ./function6.sh
```

SCRIPT:



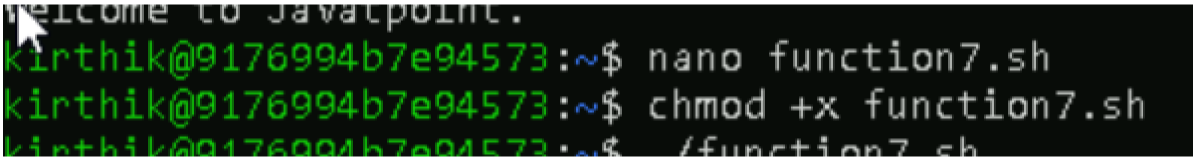
```
GNU nano 7.2
#!/bin/bash
print_it () {
local my_greet="Welcome to Javatpoint."
echo "$my_greet"
}

my_greet="$(print_it)"
echo $my_greet
```

OUTPUT:



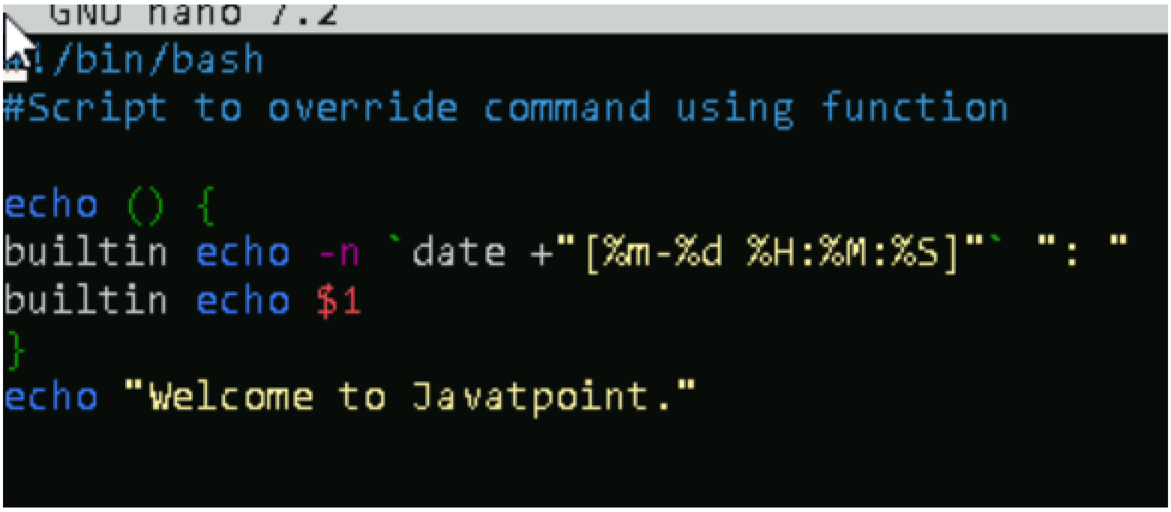
```
kirthik@9176994b7e94573:~$ nano function6.sh
kirthik@9176994b7e94573:~$ ./function6.sh
Welcome to Javatpoint.
kirthik@9176994b7e94573:~$
```

CREATING FILE:



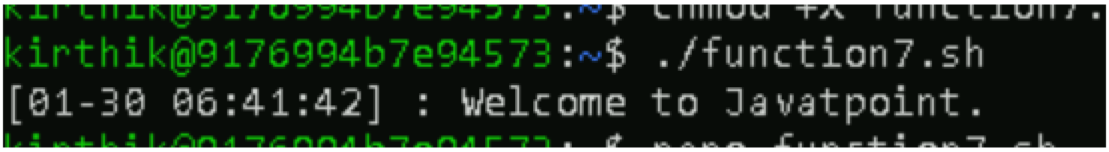
```
Welcome to Javatpoint.
kirthik@9176994b7e94573:~$ nano function7.sh
kirthik@9176994b7e94573:~$ chmod +x function7.sh
kirthik@9176994b7e94573:~$ ./function7.sh
```

SCRIPT:



```
  GNU nano 7.2
#!/bin/bash
#Script to override command using function

echo () {
builtin echo -n `date +"[%m-%d %H:%M:%S]"` ": "
builtin echo $1
}
echo "Welcome to Javatpoint."
```

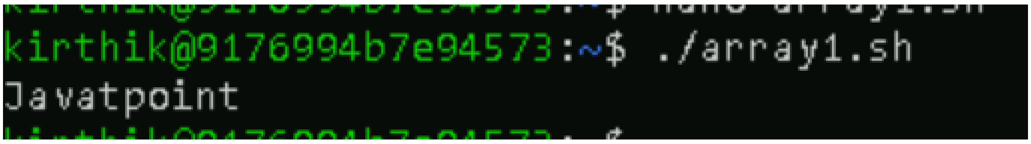
OUTPUT:



```
kirthik@9176994b7e94573:~$ chmod +x function7.
kirthik@9176994b7e94573:~$ ./function7.sh
[01-30 06:41:42] : Welcome to Javatpoint.
kirthik@9176994b7e94573:~$ nano function7.sh
```

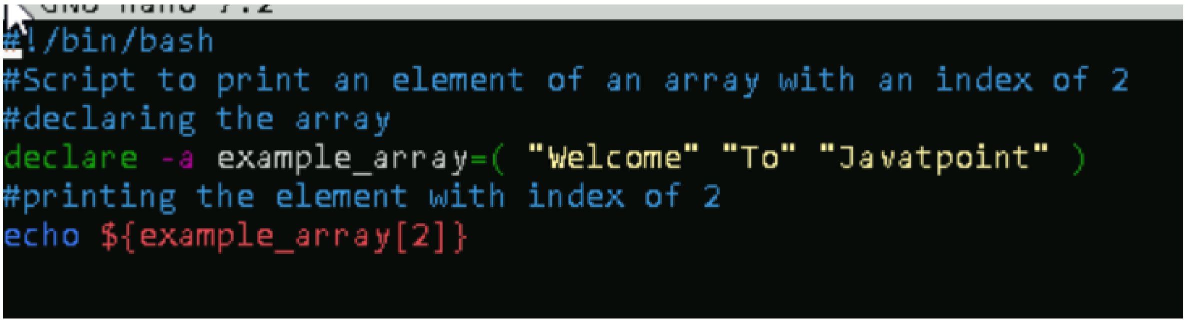
ARRAY:

CREATING FILE:



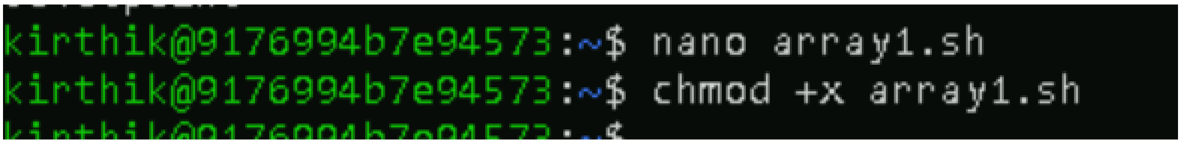
```
kirthik@9176994b7e94573:~$ nano array1.sh
kirthik@9176994b7e94573:~$ ./array1.sh
Javatpoint
kirthik@9176994b7e94573:~$
```

SCRIPT:



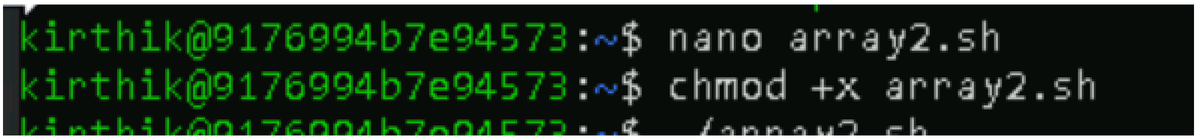
```
GNU nano 7.2
#!/bin/bash
#Script to print an element of an array with an index of 2
#declaring the array
declare -a example_array=( "Welcome" "To" "Javatpoint" )
#printing the element with index of 2
echo ${example_array[2]}
```

OUTPUT:



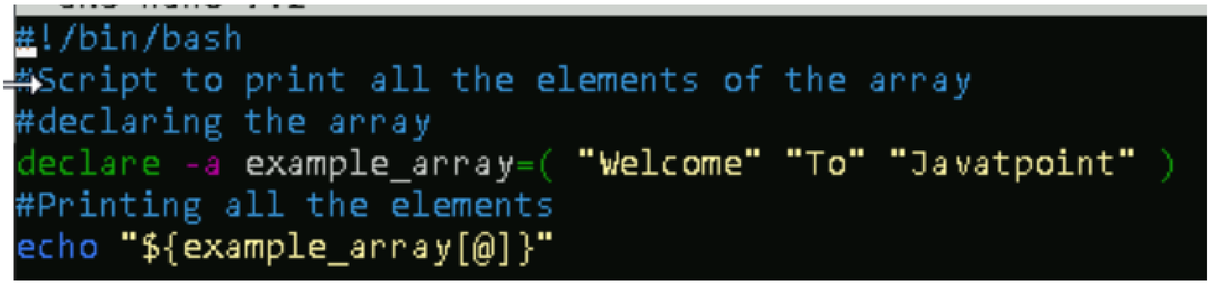
```
Javatpoint
kirthik@9176994b7e94573:~$ nano array1.sh
kirthik@9176994b7e94573:~$ chmod +x array1.sh
kirthik@9176994b7e94573:~$
```

CREATING FILE:



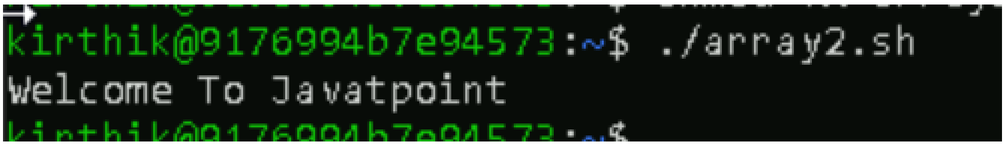
```
kirthik@9176994b7e94573:~$ nano array2.sh
kirthik@9176994b7e94573:~$ chmod +x array2.sh
kirthik@9176994b7e94573:~$ ./array2.sh
```

SCRIPT:



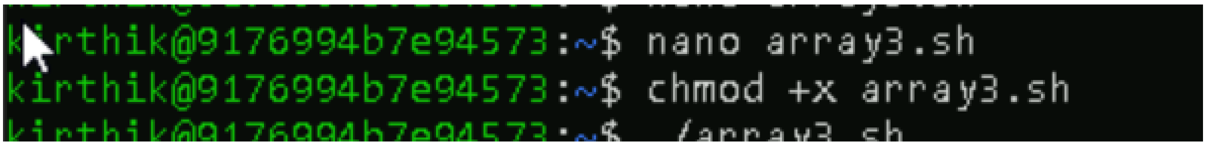
```
#!/bin/bash
#Script to print all the elements of the array
#declaring the array
declare -a example_array=( "Welcome" "To" "Javatpoint" )
#Printing all the elements
echo "${example_array[@]}"
```

OUTPUT:



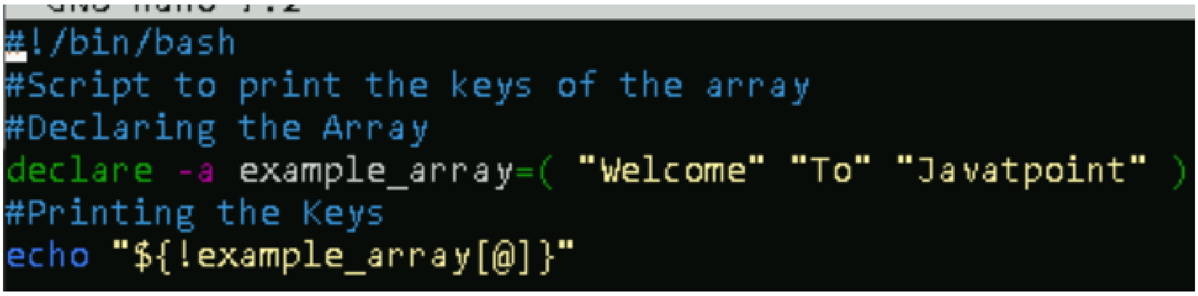
```
kirthik@9176994b7e94573:~$ chmod +x array2.sh
kirthik@9176994b7e94573:~$ ./array2.sh
Welcome To Javatpoint
kirthik@9176994b7e94573:~$
```

CREATING FILE:



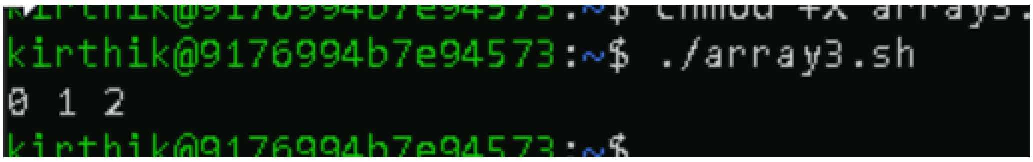
```
kirthik@9176994b7e94573:~$ nano array3.sh
kirthik@9176994b7e94573:~$ chmod +x array3.sh
kirthik@9176994b7e94573:~$ ./array3.sh
```

SCRIPT:



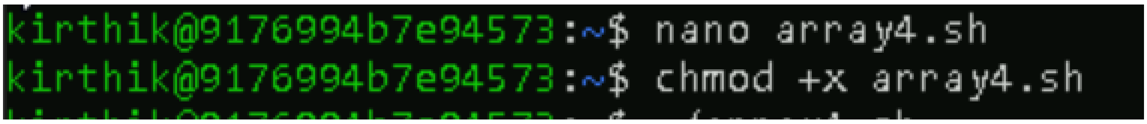
```
  GNU nano 7.2
#!/bin/bash
#Script to print the keys of the array
#Declaring the Array
declare -a example_array=( "Welcome" "To" "Javatpoint" )
#Printing the Keys
echo "${!example_array[@]}"
```

OUTPUT:



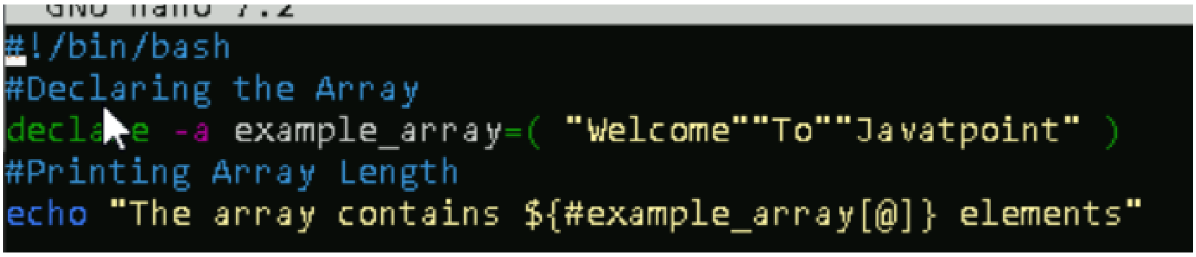
```
kirthik@9176994b7e94573:~$ chmod +x array3.
kirthik@9176994b7e94573:~$ ./array3.sh
0 1 2
kirthik@9176994b7e94573:~$
```

CREATING FILE:



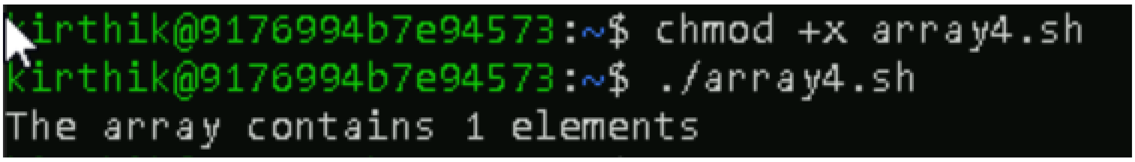
```
kirthik@9176994b7e94573:~$ nano array4.sh
kirthik@9176994b7e94573:~$ chmod +x array4.sh
```

SCRIPT:



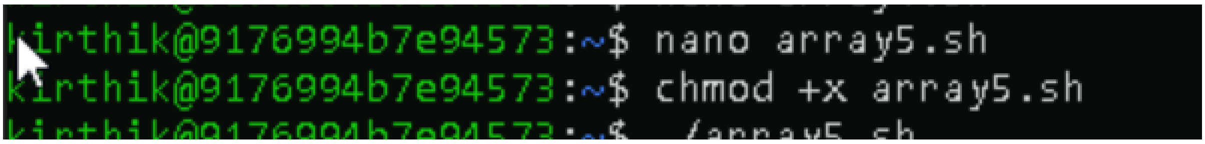
```
  GNU nano 7.2
#!/bin/bash
#Declaring the Array
declare -a example_array=( "Welcome""To""Javatpoint" )
#Printing Array Length
echo "The array contains ${#example_array[@]} elements"
```

OUTPUT:



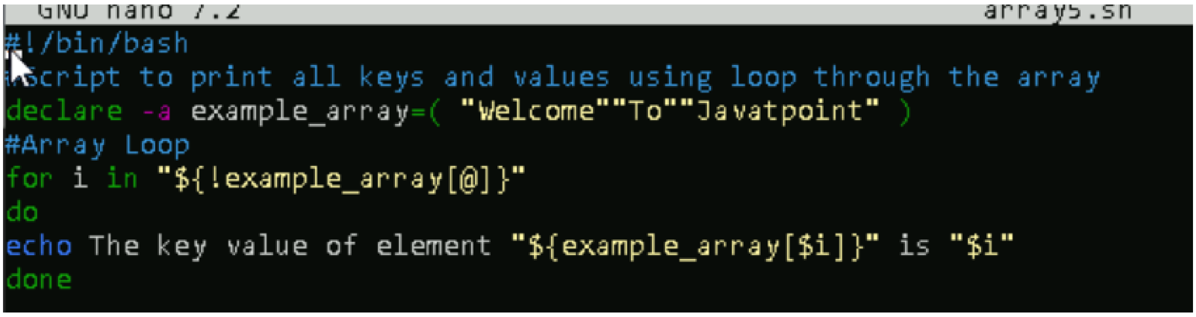
```
kirthik@9176994b7e94573:~$ chmod +x array4.sh
kirthik@9176994b7e94573:~$ ./array4.sh
The array contains 1 elements
```

CREATING FILE:



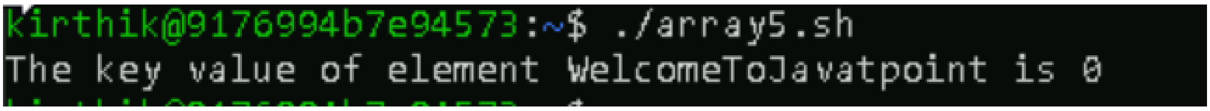
```
kirthik@9176994b7e94573:~$ nano array5.sh
kirthik@9176994b7e94573:~$ chmod +x array5.sh
kirthik@9176994b7e94573:~$ ./array5.sh
```

SCRIPT:



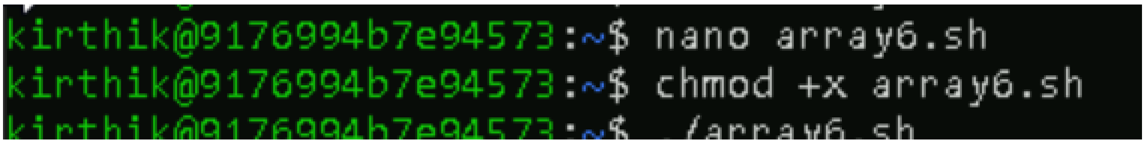
```
  GNU nano 7.2                                                    array5.sh
#!/bin/bash
#Script to print all keys and values using loop through the array
declare -a example_array=( "Welcome""To""Javatpoint" )
#Array Loop
for i in "${!example_array[@]}"
do
echo The key value of element "${example_array[$i]}" is "$i"
done
```

OUTPUT:



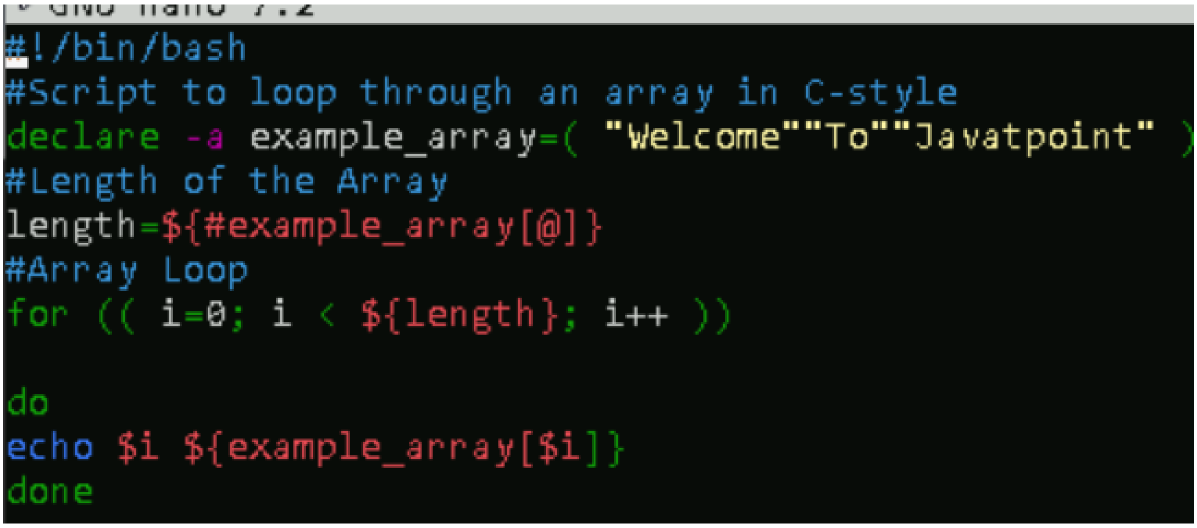
```
kirthik@9176994b7e94573:~$ ./array5.sh
The key value of element WelcomeToJavatpoint is 0
kirthik@9176994b7e94573:~$
```

CREATING FILE:



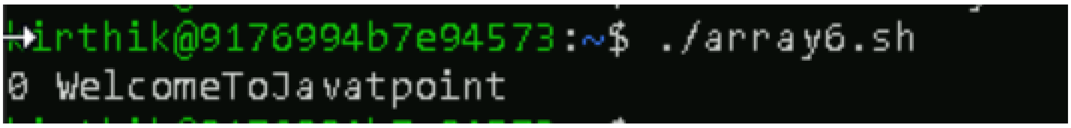
```
kirthik@9176994b7e94573:~$ nano array6.sh
kirthik@9176994b7e94573:~$ chmod +x array6.sh
kirthik@9176994b7e94573:~$ ./array6.sh
```

SCRIPT:



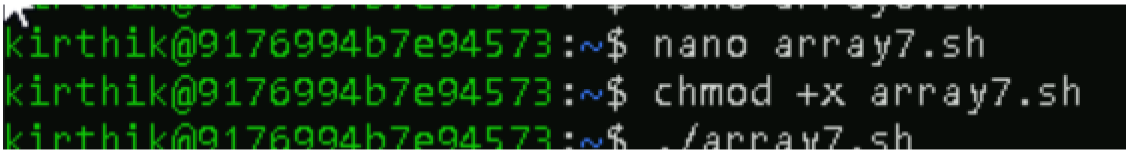
```
GNU nano 7.2
#!/bin/bash
#Script to loop through an array in C-style
declare -a example_array=( "Welcome""To""Javatpoint" )
#Length of the Array
length=${#example_array[@]}
#Array Loop
for (( i=0; i < ${length}; i++ ))

do
echo $i ${example_array[$i]}
done
```

OUTPUT:



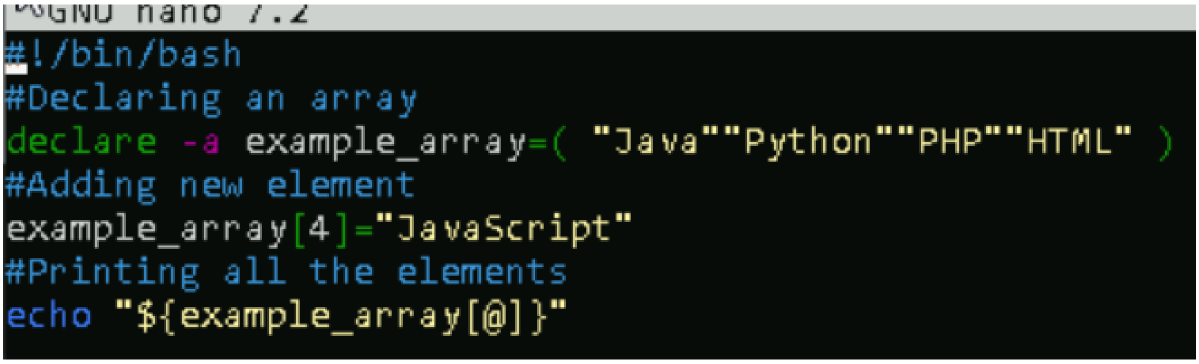
```
kirthik@9176994b7e94573:~$ ./array6.sh
0 WelcomeToJavatpoint
```

CREATING FILE:



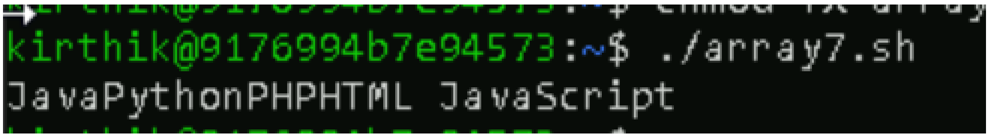
```
kirthik@9176994b7e94573:~$ nano array7.sh
kirthik@9176994b7e94573:~$ chmod +x array7.sh
kirthik@9176994b7e94573:~$ ./array7.sh
```

SCRIPT:



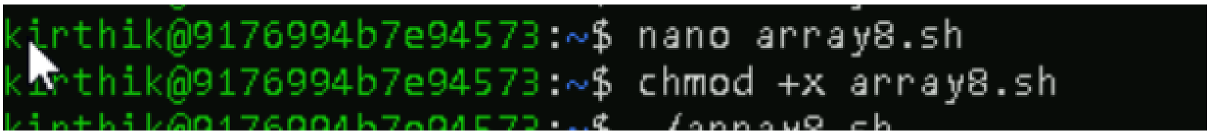
```
GNU nano 7.2
#!/bin/bash
#Declaring an array
declare -a example_array=( "Java""Python""PHP""HTML" )
#Adding new element
example_array[4]="JavaScript"
#Printing all the elements
echo "${example_array[@]}"
```

OUTPUT:



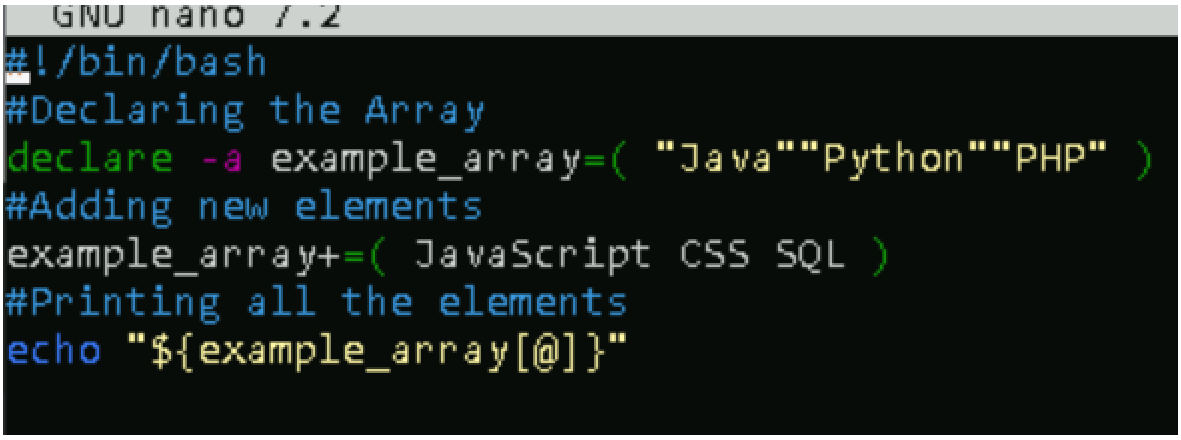
```
kirthik@9176994b7e94573:~$ ./array7.sh
JavaPythonPHPHTML JavaScript
```

CREATING FILE:



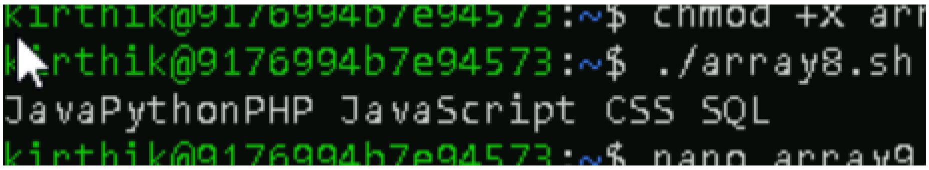
```
kirthik@9176994b7e94573:~$ nano array8.sh
kirthik@9176994b7e94573:~$ chmod +x array8.sh
kirthik@9176994b7e94573:~$ ./array8.sh
```

SCRIPT:



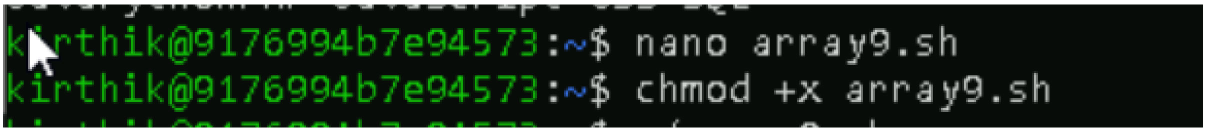
```
#!/bin/bash
#Declaring the Array
declare -a example_array=( "Java""Python""PHP" )
#Adding new elements
example_array+=( JavaScript CSS SQL )
#Printing all the elements
echo "${example_array[@]}"
```

OUTPUT:



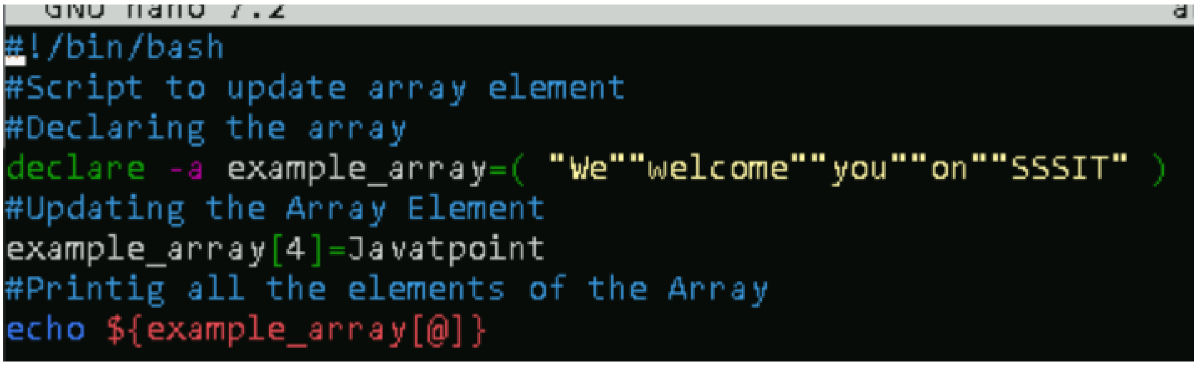
```
kirthik@9176994b7e94573:~$ chmod +x arr
kirthik@9176994b7e94573:~$ ./array8.sh
JavaPythonPHP JavaScript CSS SQL
kirthik@9176994b7e94573:~$ nano array9
```

CREATING FILE:



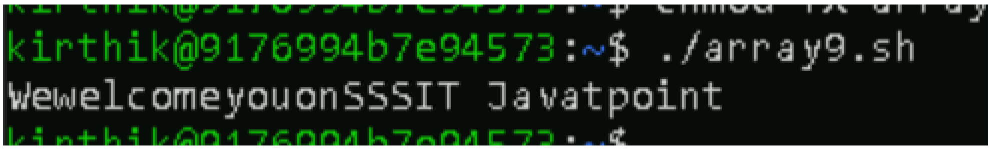
```
kirthik@9176994b7e94573:~$ nano array9.sh
kirthik@9176994b7e94573:~$ chmod +x array9.sh
```

SCRIPT:



```
  GNU nano 7.2
#!/bin/bash
#Script to update array element
#Declaring the array
declare -a example_array=( "We""welcome""you""on""SSSIT" )
#Updating the Array Element
example_array[4]=Javatpoint
#Printig all the elements of the Array
echo ${example_array[@]}
```

OUTPUT:



```
kirthik@9176994b7e94573:~$ ./array9.sh
WewelcomeyouonSSSIT Javatpoint
kirthik@9176994b7e94573:~$
```