**1. Aim:** Write a Ruby script to create a new string which is n copies of a given string where

n is a non negative integer.

# Program:

# def stringcopy(str,n)

# return str\*n

# end

# puts "The output after string copy is: "

# puts stringcopy('abc',4)

# Output:

The output after string copy is:

abcabcabcabc

**2. Aim:** Write a Ruby script which accept the radius of a circle from the user and compute

the parameter and area.

# Program:

# puts "Enter the radius value: "

# radius = gets.chomp.to\_f

# puts radius

# perimeter = 0.0

# area = 0.0

# perimeter = 2 \* 3.14 \* radius

# area = 3.14 \* radius \* radius

# puts "The perimeter of a circle is #{perimeter}"

# puts "The area of a circle is #{area}"

# Output:

# Enter the radius value:

# 4

# The perimeter of a circle is 25.12

# The area of a circle is 50.24

**3. Aim:** Write a Ruby script which accept the user's first and last name and print them in

reverse order

**Program:**

# puts "Enter first name: "

# str1 = gets.chomp

# puts "Enter second name: "

# str2 = gets.chomp

# puts "The result is #{str2} #{str1}"

# puts "The result is #{str2.reverse} #{str1.reverse}"

# Output:

# Hi

# Ruby

# The result is Ruby Hi

# The result is ybuR iH

**4. Aim:** Write a Ruby script to accept a filename from the user print the extension of that

**Program:**

# file = "/user/system/test.rb"

# fbname = File.basename file

# puts "File name: "+fbname

# bname = File.basename file,".rb"

# puts "Base name: "+bname

# ffextn = File.extname file

# puts "Extention: "+ffextn

# path\_name= File.dirname file

# puts "Path name: "+path\_name

# Output:

# File name: test.rb

# Base name: test

# Extention: .rb

# Path name: /user/system

**5. Aim:** Write a Ruby script to find the greatest of three numbers

**Program:**

# a = 10

# b = 40

# c = 30

# if(a > b and a > c)

# puts "#{a} is greater"

# elsif(b > c)

# puts "#{b} is greater"

# else

# puts "#{c} is greater"

# 

# end

# Output:

# 40 is greater

**6. Aim:** Write a Ruby script to print odd numbers from 10 to 1

# Program:

puts "Odd Numbers 1 to 10"

for i in 1..10 do

if (i % 2 != 0)

puts "#{i}"

end

end

**Output:**

1

3

5

7

9

**7. Aim:** Write a Ruby scirpt to check two integers and return true if one of them is 20 otherwise return

their sum program

# Program:

a = 10

b = 30

if a == 20 || b == 20

puts "true"

else

puts "sum of 2 number is", a + b

end

**Output:**

Sum of 2 numbers is 40

**8**. **Aim:** Write a Ruby script to check two temperatures and return true if one is less than 0 and the

other is greater than 100

# Program:

a = -20

b = 150

if (a < 0 && b > 100) || (b < 0 && a > 100)

puts "true"

else

puts "false"

end

**Output:**

true

**9.** **Aim:** Write a Ruby script to print the elements of a given array

# Program:

ar = [2, "akshitha", 'a']

for i in ar do

puts "#{i}"

end

**Output:**

2

akshitha

a

**10. Aim:** Write a Ruby program to retrieve the total marks where subject name and marks of a

student stored in a hash

**Program:**

marks={

'science'=> 50,

'maths'=> 60,

'social'=>55

}

total = 0

marks.each {|key,value|

total +=value

}

puts "Total Marks: "+ total.to\_s

**Output:**

Total Marks: 165

**11. Aim:** Write a TCL script to find the factorial of a number

**Program:**

set i 1;

set fact 1

set x 5

while {$i <= $x} {

set fact [expr $fact \* $i]

incr i

}

puts $fact

**Output:**

120

**12. Aim:** Write a TCL script that multiplies the numbers from 1 to 10

**Program:**

set i 1;

set pro 1

set x 10

while {$i <= $x} {

set fact [expr $pro \* $i]

incr i

}

puts $pro

**Output:**

3628800

**13. Aim:** Write a TCL script for Sorting a list using a comparison function

**Program:**

set list [list 2 5 3 4 1]

puts $list

set ar [lsort $list]

puts $ar

**Output:**

1 2 3 4 5

**14. Aim:** Write a TCL script to (i)create a list (ii ) append elements to the list (iii)Traverse the list

(iv)Concatenate the list

**Program:**

set list [list 2 5 3 4 1]

puts $list

set ar [lsort $list]

puts $ar

append list " " 6

puts $list

lappend list [list 7 8]

puts $list

**Output:**

2 5 3 4 1

1 2 3 4 5

1 2 3 4 5 6

1 2 3 4 5 6 7 8

**17. Aim:** a) Write a Perl script to find the largest number among three numbers

**Program:**

$x=4;

$y=6;

$z=5;

if($a > $b) {

if($a> $c) {

print " $a is largest number\n";

} else {

print " $c is largest number\n";

}

} elsif($b >$c) {

print " $b is largest number";

} else {

print " $c is largest number";

}

**Output:**

6 is largest number

**b)** Write a Perl script to print the multiplication tables from 1-10 using subroutines.

**Program:**

for($i=1; $i<=10; $i++)

$a[$i]=$i;

for($i=1; $i<=10; $i++) {

for($j=1; $j<=10; $j++)

print(($a[$j]\*$a[$i])," ");

print "\n\n";

}

**Output:**

1 2 3 4 5 6 7 8 9 10

2 4 6 8 10 12 14 16 18 20

3 6 9 12 15 18 21 24 27 30

4 8 12 16 20 24 28 32 36 40

5 10 15 20 25 30 35 40 45 50

6 12 18 24 30 36 42 48 54 60

7 14 21 28 35 42 49 56 63 70

8 16 24 32 40 48 56 64 72 80

9 18 27 36 45 54 63 72 81 90

10 20 30 40 50 60 70 80 90 100

**18. Aim:** Write a Perl program to implement the following list of manipulating functions

a)Shift

b)Unshift

c) Push

**Program:**

**a)**

@x = ('Java', 'C', 'C++');

print "Original array: @x \n";

print "Value returned by shift: ", shift(@x);

print "\nUpdated array: @x";

**Output:**

Original array: Java C C++

Value returned by shift :Java

Updated array: C C++

**b)**

@x = ('Java', 'C', 'C++');

print "Original array: @x \n";

print "No of elements returned by unshift: ", unshift(@x, 'PHP', 'JSP');

print "\nUpdated array: @x";

**Output:**

Original array: Java C C++

No of elements returned by unshift :5

Updated array: PHP JSP Java C C++

**c)**

@x = ('Java', 'C', 'C++');

  print "Original array: @x \n";

push(@x, 'Python', 'Perl');

print "Updated array: @x";

**Output:**

Original array: Java C C++

Updated array: Java C C++ Python Perl

Roll No.: 18WH1A1234

Date:

**19. Aim:** a) Write a Perl script to substitute a word, with another word in a string.

b) Write a Perl script to validate IP address and email address.

**Program:**

**a)**

$string = "Hello all!!! Welcome to SL Lab";

$string =~ s/SL Lab/Perl/;

print "$string\n";

**Output:**

Hello all!!! Welcome to SL Lab Perl