**Quiz 4**

1. Ruby Program that prints the Time in different time zones

t=Time.new

puts t

puts t.localtime

puts t.gmtime

2. Write a program that iterates over an array and builds a new array that is the result of incrementing each value in the original array by a value of 2. You should have two arrays at the end of this program, The original array and the new array you've created.Print both arrays to the screen using the p method instead of puts.

X=[1,2,3,4]

Y=[]

x.each do |i|

y<<n+2

end

p x

p y

3. Ruby program to find the leap year when start and end year are given.

while true

puts 'Input starting year:'

year\_1 = gets.chomp

num\_year\_1 = year\_1.to\_i

puts 'Input second year:'

year\_2 = gets.chomp

num\_year\_2 = year\_1.to\_i

puts 'These are the leap years between these two years:'

if num\_year\_1 > num\_year\_2

while num\_year\_1 >= num\_year\_2

if num\_year\_1 % 4 == 0 && num\_year\_1 % 100 == 0

puts num\_year\_1

end

num\_year\_1 -= num\_year\_1 - 1

end

elsif num\_year\_2 > num\_year\_1

while num\_year\_2 >= num\_year\_1

if num\_year\_2 % 4 == 0 && num\_year\_2 % 100 == 0

puts num\_year\_2

end

num\_year\_2 -= 1

end

elsif num\_year\_1 == num\_year\_2

puts 'These 2 years are the same, please try again.'

end

if year\_1 == 'end'

break

end

end

4. Ruby program that takes a numerical value and give the output as Roman number

5. Write a your own ruby program that uses a Queue

Arr[]

Arr.unshift(“x”)

Arr.unshift(“y”)

Puts Arr.size

Arr.pop()

Puts arr.size

6. Write your own ruby program that uses each\_with\_index method to iterate through an array that prints each index and value

a=[“x”,”y”,”z”]

a.each\_with\_index do | b, index|

puts “{index+1}.{b}”

end

7. Ruby Program that prints if duplicates existing in a array

a=[x,y,x,z]

a.detect{|e| a.count(e)>1}

puts a.count(e)

8. Write a Ruby program that prints pascal triangle

def triangle(n)

for r in n:

lst=[1]

term=1

k=0

(0..r+1).step(1){|index|

term=term\*(r-k+1)/k

lst.append(term)

k+=1

}

print lst

end

end

triangle(4)

9. Write a Ruby program that prints the length of the common string when two strings are compared.