**Quiz 1**

1. Write a Ruby Program to compute that takes input number from a user and prints All Fibonacci Numbers Upto that number. Your program should validate if the user provided input is a number or not.

First n Fibonacci numbers first using loop.

Second, write the same program using Recursion.

Ans

print "Please enter n"

n = gets.to\_i

def fib(n)

a = 0

b = 1

print a

for i in 0..n

c = a + b

print "#{c}"

a = b

b = c

i = i+1

end

end

fib(n)

gets

2. Write a Ruby program to find a number is prime or not

Ans

print "Enter a number"

a = gets.to\_i

for i in 2..a

if(a%2 != 0 && a!= 0 && a%i != 0 || a == 2 )

then

puts "Prime"

break

else

puts "Not a prime"

break

end

end

gets

3. Write a Ruby program using Recursion to print the Factorial of a number

Ans

def fact(a)

(1..a).inject {|product, a| product \* a }

end

gets

puts fact(5)

4. Write a Ruby program that Prints all permutations of a string using loops

for example, if input to program is xyz, the program prints x, xy,xyz,y,yz,xyz etc

Ans

p "xyz".chars.permutation.map &:join

5. Ruby rogram to reverse a string

Ans

print "Please enter a string"

str = gets

puts "Revers of #{str} ", str.reverse

gets

6. Ruby program that takes a image url (http://www.bacteriainphotos.com/photo%20gallery/mrsa%20picture.jpg ) and prints it's height and width.

Hint: use fast image

<https://github.com/sdsykes/fastimage>

7. Write a program to print the top store in reddit.

HINT: reddit.com/.json

8. Write a Ruby program to sort an array.

Ans

input = [1,5,3,6,8,2]

print "Sorted array ", input.sort

puts

print "Sorted array in reverse format ", input.sort.reverse

gets

9. Write a Ruby program to convert all the elements of an array to a single string

Ans

z = [1,6,3,4,7]

puts "Input array is", z

y1 = z.join('')

puts "Join form of array", y1

y2 = z.sort

y3 = y2.join('')

puts "Sorted join of array", y3

gets

10. Write a Ruby program that iterates through every element of an array and returns a new array HINT: .map()

Ans

array = [10, 20, 30, 40, 50]

array.each\_index {|i| print "#{array[i]/10}"}

puts

gets