

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.

```
class Fibo
  def get_value
    n=gets.chomp.to_i
    a=0
    b=1
    sum=0
    while sum<n do

      sum= a+b
      puts sum
      a=b
      b=sum
    end
  end

  end

  d=Fibo.new
  d.get_value
```

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

```
num = gets.to_i
last = gets.to_i
while (num <= last)
  prime_flag = true

  x = 2

  while (x <= num /2)
    if (num %x == 0)
      prime_flag = false
      break
    end
    x += 1
  end
end
if prime_flag
```

```

        puts "A prime number > " + num.to_s
    end
    num += 1
end

```

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

```

def fact(x)
    fact=1
    for i in 1..x
        fact=fact*i
    end
    puts "The factorial of a given number is #{fact}"
end

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

5. Ruby program to reverse a string

```
"I ma ohw".reverse
```

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>

```
FastImage.size(http://www.bacteriainphotos.com/photo%20gallery/mrsa%20picture.jpg)
```

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

HINT: [reddit.com/.json](https://www.reddit.com/.json)

8. Write a Ruby program to sort an array.

```
array = [3,1,5,2,6,4]

array.sort {|v1,v2| v1 <=> v2}
array.sort {|v1,v2| v2 <=> v1}
```

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

```
array = [3,2,5,4,1,6]
array.map { |i| "'" + i.to_s + "'" }.join(",")
```

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

```
array=[3,5,2,6,8,1,]
l=array.length
for i in 0..l
    s=array[i]
    puts "Array #{i} is [{s}]"
end
```