Quiz 2

1. Ruby program when that accepts a date in a month and prints it out the appropriate suffix. For example, for 1 as input, print 1st, 2 as input 2nd, 3 as input 3rd etc

```ruby
class Fixnum
  def ordinalize
    if (11..13).include?(self % 100)
      "#{self}th"
    else
      case self % 10
        when 1; "#{self}st"
        when 2; "#{self}nd"
        when 3; "#{self}rd"
        else   "#{self}th"
      end
    end
  end
end
now = Time.now
puts now.strftime("#{now.day.ordinalize} of %B, %Y")
```

2. Write your own ruby program using a case statement

```ruby
$age =  5
case $age
when 0 .. 2
   puts "baby"
when 3 .. 6
   puts "little child"
when 7 .. 12
   puts "child"
when 13 .. 18
   puts "youth"
else
   puts "adult"
end
```

3. Ruby Program that iterates numbers with upto loop

```ruby
for j in 1..5 do
   for i in 1..5 do
      print i,  " "
   end
puts
end
```

4. Write a Ruby program to print numbers from 1 to 50 and also in reverse order

```ruby
for j in 1..50 do
        print j,  "\n "
end

50.step(0, -1) { |i| puts i }
```

5. Write your own Ruby program using loops and iterators. Explain the difference between loops, iterators and blocks

6. Write a Ruby program that loops through a array and checks if a pattern exists in the array elements

```ruby
a = ['cat','dog','elephant']
boolean = a.any? { |s| s.include?('ele') }
puts boolean

boolean2 = a.any? { |s| s.include?('nope') }
puts boolean2
```

7. Write your own Ruby program using a Hash that loops through :

Print all Values while looping with Keys
Print all Keys while looping through Values
Print Keys, Values as pair.

```ruby
frequencies =
{
   "Hello" => 1,
   "my" => 1,
   "name" => 2,
   "is" => 1,
   "Moncef" => 1,
   "and" => 2,
   "I" => 1,
   "love" => 3,
   "Ruby" => 1
   }
frequencies.each { |key| puts "#{key}" }
frequencies.each { |value| puts "#{value}" }
frequencies.each { |key, value| puts "#{key} #{value}" }
```

8. Write a Ruby program that takes number as input and recursively calculates the power of 2 until the calculated number is less than 10000 and prints the maximum power for that number.

9. Ruby program to convert Celsius temperature to Fahrenheit

```ruby
puts "Enter temperature in Celsius"
current_temperature = gets.strip.to_f
puts "temperature in Celsius : #{current_temperature}"

  new_temperature = (current_temperature * 9 / 5) + 32
   puts "New temperature in fahrenheit : #{new_temperature}"
```

10. Write a program to create a Calculator class with add(), substract(), multiply() and divide(), then take two numbers and choice of operation from user and display output using objects

```ruby
class Calculator
  def initialize(n1, n2)
    @nm1=n1
    @nm2=n2
  end
  def adition()
    print "Numbers are : " ;
     print  @nm1," and ", @nm2, "\n"
    print "after add : " , (@nm1.to_i + @nm2.to_i), "\n";
   end
   def substract()
    print "Numbers are : " ;
     print  @nm1," and ", @nm2, "\n"
     print "after substract : " , (@nm1.to_i - @nm2.to_i), "\n";
   end
   def multiply()
    print "Numbers are : " ;
     print  @nm1," and ", @nm2, "\n"
     print "after multiply : " , (@nm1.to_i * @nm2.to_i), "\n";
   end
   def divide()
    print "Numbers are : " ;
     print  @nm1," and ", @nm2, "\n"
     print " after divide : " , (@nm1.to_i / @nm2.to_i), "\n";
   end
  def chose
    score = gets.to_i
    result = case score
  when 1 then adition()
  when 2 then substract()
  when 3 then multiply()
  when 4 then divide()
  else "Invalid input"
```

```ruby
    end
    puts result

  end
end
puts "Enter first Number"
score1 = gets.to_i
puts "Enter second Number"
score2 = gets.to_i

cal2=Calculator.new(score1, score2)
puts "choice a Number to Arithmatic operation between 1 and 4"
puts "1 for adition"
puts "2 for substract"
puts "3 for multiply"
puts "4 for divide"
cal2.chose()
```