1)Program for printing the numbers in the forward and the backward as well.

for i in 1..50

puts i

end

----------

num=50

num.times do

num=num-1

puts num

end

2)Program using upto loop

4.upto(9) do |x|

x.upto(x+5) do |y|

print y

end

end

3)Program using case statement

puts "Enter the month"

month =gets.to\_i

case month

when 1..4

puts "The season is Spring"

when 5..8

puts "The season is Summer"

when 9..12

puts "The season is Fall"

end

gets

4.) 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.

puts "Enter a number"

num=gets.to\_i

while num\*\*2<10000

p=num\*\*2

puts p

num=p

end

for i in 1..10

s= p\*\*i

if s<10000

puts i

end

end

gets

5)Program for converting Celsius to Fahrenheit

puts "Enter the temperatute in celsius degrees"

c=gets.to\_i

f=(9.0\*c/5.0)+32

puts "Fahrenheit conversion of the given temperature is #{f}F"

gets

6.)Ruby program for Calculator class

class Calculator

def add(x,y)

z=x+y

puts "The addition of two numbers is #{z}"

end

def subtract(x,y)

z=x-y

puts "The subtraction of two numbers is #{z}"

end

def multiply(x,y)

z=x\*y

puts "The multiplication of two numbers is #{z}"

end

def division(x,y)

z=x/y

puts "The division of two numbers is #{z}"

end

end

puts "Enter first number"

num1=gets.to\_i

puts "Enter second number"

num2=gets.to\_i

calc1=Calculator.new

calc1.add(num1,num2)

calc1.subtract(num1,num2)

calc1.multiply(num1,num2)

calc1.division(num1,num2)

gets

7.)Program for printing the date with a suffix

puts "Please enter date"

d=gets.to\_i

if d<=31

case d

when 4..20 , 24..30

puts "#{d}th"

when 1,21,31

puts "#{d}st"

when 2,22

puts "#{d}nd"

when 3,23

puts "#{d}rd"

end

else

puts "The date is invalid"

end

gets

8)Program using iterator

4.upto(9) do |x|

x.upto(x+5) do |y|

print y

end

end

8)Program using loop

x=1

while x<100

puts x

x+=1

end

9)Program that iterates an array

name=["$","shafi","anudeep","sheik"]

n=name.length

for i in 0..n-1

name.include? ‘$’

end