How to print something out on the screen

You can use "print". For e.g., print "Hello World"	You can use "puts". For e.g., puts "Hello World"
When you use print, everything gets printed out on the same line	When you use puts, everything gets printed out on a new line

Variables

```
Let's say we want to print out the message:
I am 18 years old. I like ice skating. I went ice skating for the first time when I was 18.
You can create variables:
charac te r_age = " 18 "
charac te r _ sport = "ice skatin g"
To print this message, write:

charac te r_age = " 18 "
charac te r _ sport = "ice skatin g"
puts ("I am " + charac te r_age + " years old.")
puts ("I like " + charac te r _ sport)
puts ("I went " + charac te r _ sport + " for the first time when I was " + charac te r _age)

You can also modify the message half way:
charac te r_age = " 18 "
charac te r _ sport = "ice skatin g"
puts ("I am " + charac te r_age + " years old.")
puts ("I like " + charac te r _ sport)
charac te r _ sport = " cy c l in g"
puts ("I went " + charac te r _ sport + " for the first time when I was " + charac te r _age)
It will output:
I am 18 years old. I like ice skating. I went cycling for the first time when I was 18.
```

Data Types

```
String /Text
name = " Mi k e "
Integer (A full number)
age = 18. Note that you do not
need to include quotat ions.
Floating Point (A number that
has a decimal)
number = 18.9
Boolean (on/off, true/f alse,
1/0)
isfemale = true
Nil (referring to " no t h -
in g". Absence of a value)
flaws = nil
```

What does .close() do?

What does gets.chomp do?

```
puts "Enter your name"
name = gets
puts ("Hello " + name + " , you
are cool!")
" get s" alone will put ", you
are cool!" on a new line.
To mitigate this, we use
gets.chomp to ensure that
" Hello " + name + " , you are
cool!" is on one line.
```

How to print a new line?

```
print " Hello\n World"
It will output:
Hello
World
```

What is Array.new?

```
friends = Array.new
```

How to calculate the length of a string?

```
phrase = "Giraffe Academy"
puts phrase.le ngth()
It will output: 15
```

How to get a range of text?

```
phrase = "Giraffe Academy"
puts phrase [0,3]
It will output: Gir
```

How to find the index position of a string

```
phrase = "Giraffe Academy"
puts phrase.in dex ("ff e")
It will output the index
position it starts at: 4
```

How to make a string uppercase/lower-case?

```
def
write_data_to_file(file_name)
    a_f ile.pu ts('5')
    a_f ile.pu ts( 'Fred')
    a_f ile.pu ts( 'Sam')
    a_f ile.pu ts( 'Jill')
    a_f ile.pu ts( 'Je nny')
    a_f ile.pu ts( 'Zo rro')
    a_f ile.cl ose()
end
```

The close() is an inbuilt function in Ruby.

Parameters: The function does not takes any element.
Return Value: It closes the queue and does not returns anything.

Arrays

```
friends = Array["Kevin",
"Karen", "Oscar"]
puts friend s[-2]
It will output: Karen
If you want to select names from
index 0 - 2:
friends = Array[ " Kev in", " -
Kar en", " Osc ar"]
puts friends[0, 2]
It will output: Kevin, Karen.
Note that is does
not include Oscar.
```

Typing input into the terminal

```
puts "Enter your name: "
name = gets.c homp()
puts " Enter your age: "
age = gets.c homp()
puts ("Hello " + name + ", you
are" + age + " years old")
```

Here we're basically telling Ruby that we want
friends to be an array but we don't want to put
any new values into it just yet

friends[0] = "Molly"

puts friends[0]

Calculating age when inputting year of birth

```
require 'date'
def hello()
puts("what year were you born?")
year_born = gets.c homp()
age = Date.t oda y.year -
year_b orn.to_i() - 1
puts("So you are " + age.to_s +
" years old")
end
def
main()
hello()
end
main()
```

How to print out a quotation mark in a string

puts "Giraffe\" Academy"

It will output: Giraffe" Academy

How to delete extra trailing and whitespace?

```
phrase = " Giraffe Academy "
puts phrase.st rip()
It will output "  Gi raffe
Academ  y"
```

```
phrase = " Giraffe Academ y"
puts phrase.up  case()
puts phrase.do  wn c ase()
It will output:
GIRAFFE ACADEMY
giraffe academy
```

What is a class?

```
class Book
    att r_a ccessor :title,
:author, :pages
end
book1 = Book.new()
book1.t itle = " Harry Potter "
book1.a uthor = "JK Rowlin g"
book1.p ages = 400
puts book1
```

This class is a template or blueprint for representing a Book inside of the program. Essentially it's like creating your own Data Type.