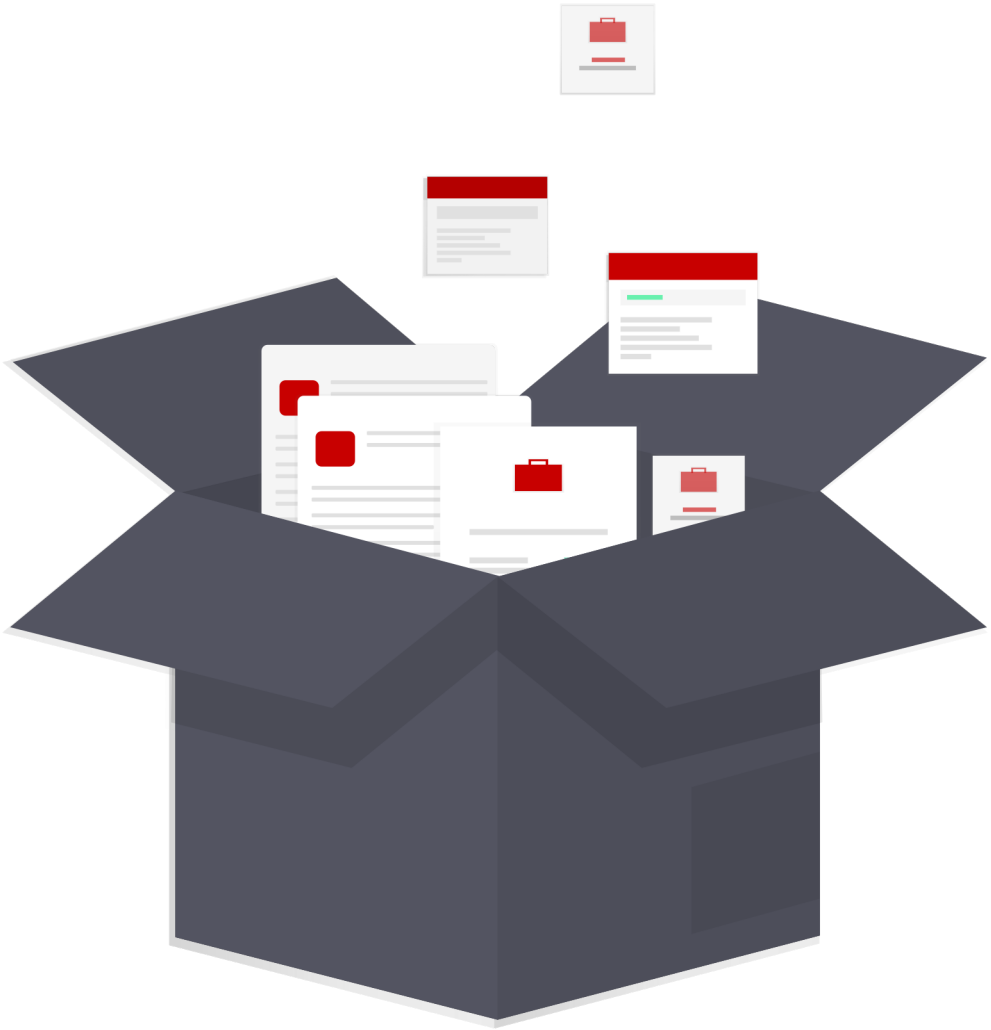
code_in_place_2021

Section 02



Icebreaker

- How have you enjoyed Code in Place so far?
- What are some frustrations that you faced whilst coding?
- What are the biggest mysteries for you when it comes to coding?

Shared Agreements

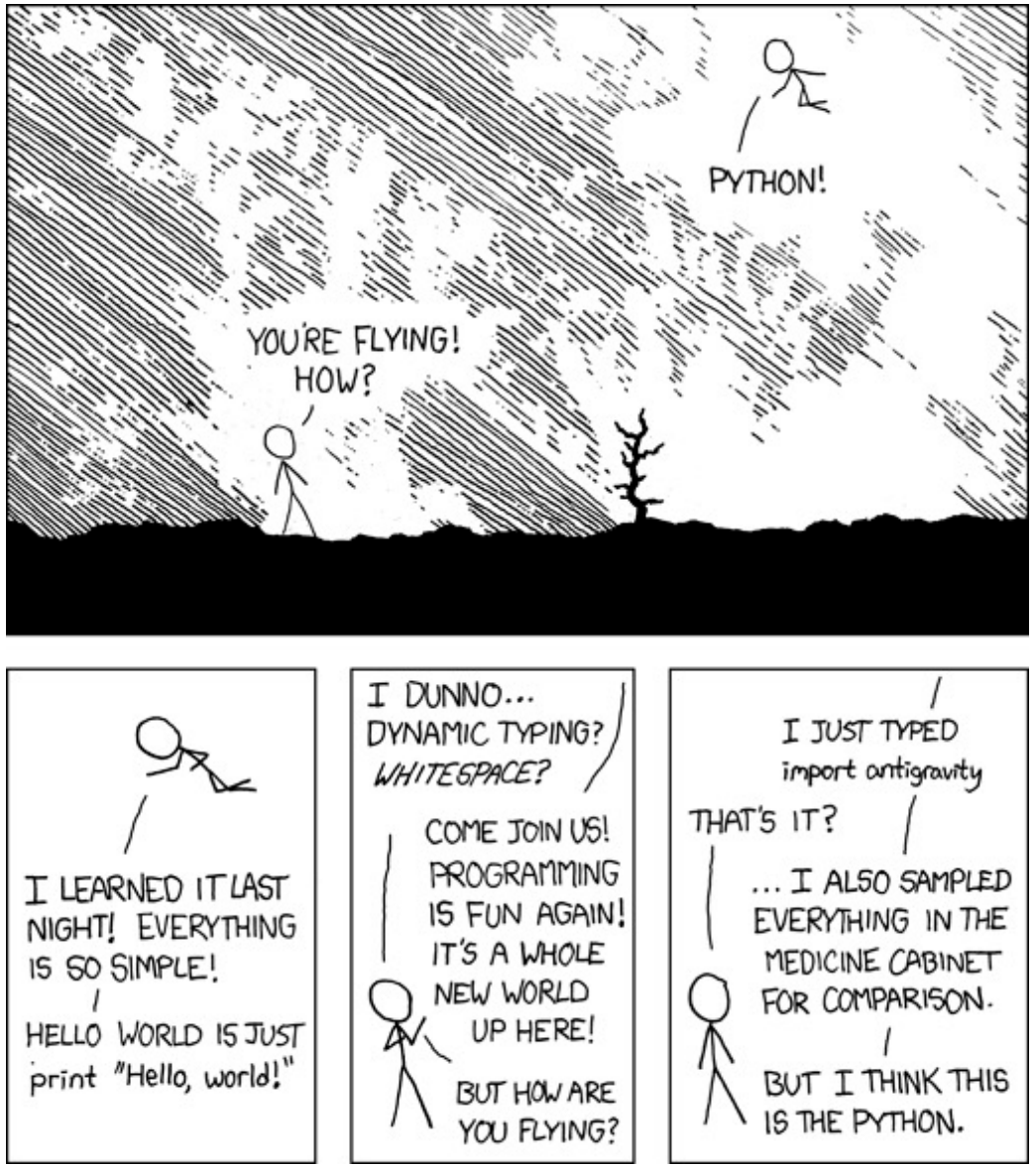
- ✓ **Use professional, courteous, and thoughtful language**
  Be mindful of your peers when speaking and asking questions

- ✓ **Assume your peers have good intention**
  Even if their words or actions cause concern, remember that we're all learning together.

- ✓ **Ask questions**
  There is NO silly question

Review concepts

- Variables
- Expressions

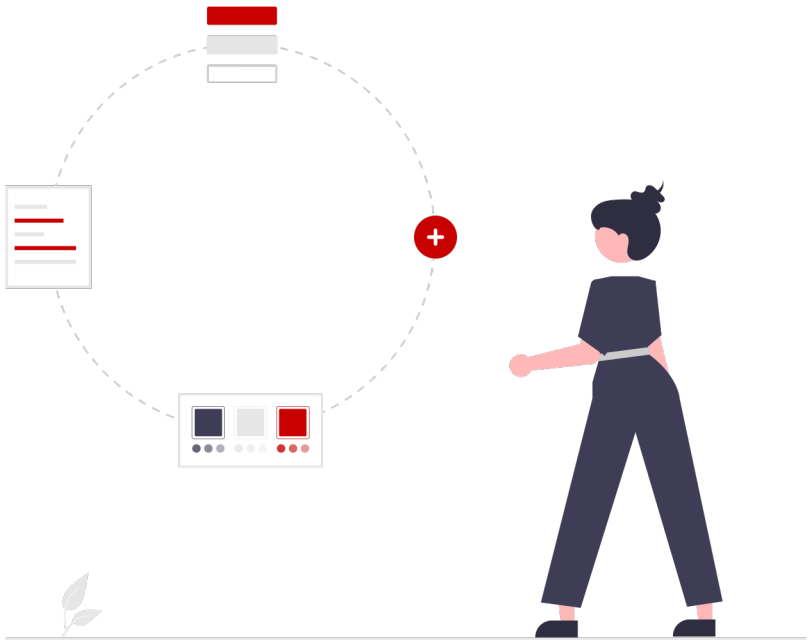


https://xkcd.com/353/

Variables

```
current_year = 2021

bitcoin_price_usd = 53408.10

rocket = “Atlas V”

is_today_thursday = True

GRAVITY = 9.8
```

Types



Integer (*int*)

-2, -1, 0, 1, 2, 3, 4, 5

Floating-point numbers (*float*)

-1.99, -1.0, -0.22, 0.0, 0.69, 11.2

String (*str*)

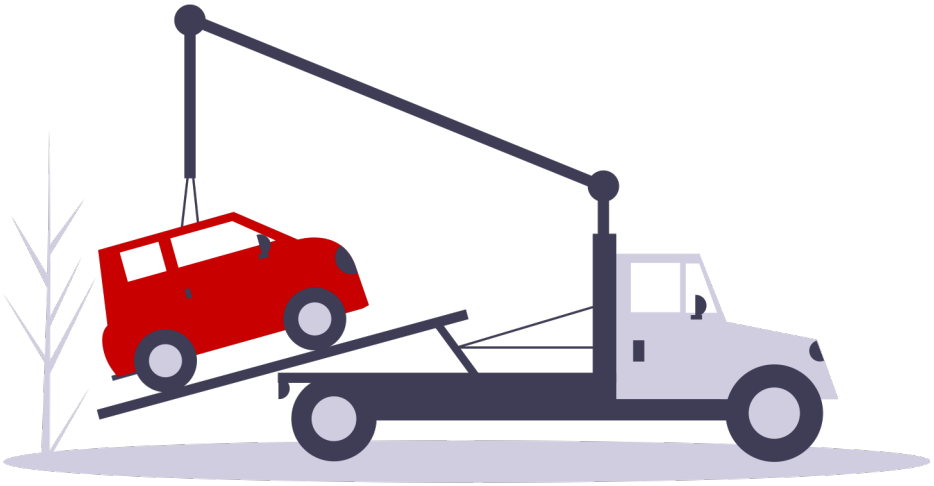
“hello world!”, “code in place 2021”

Boolean (*bool*)

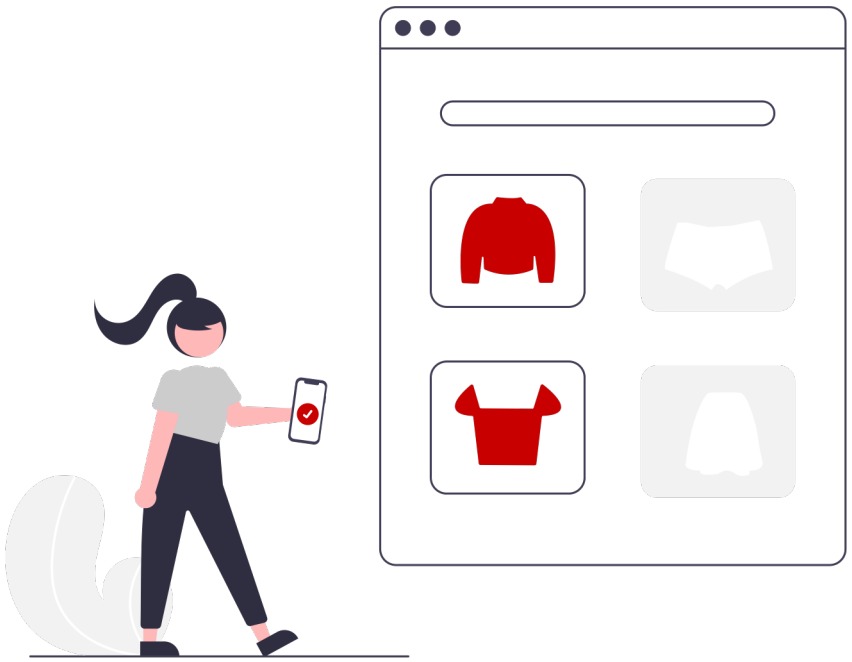
True, False

Casting

```
#declare variables
text_as_string = "code in place”
int = 2021
float = 99.99

#type casting
int(text_as_string)    #ERROR
float(int)             #2021.0
str(float)             #99.99
```

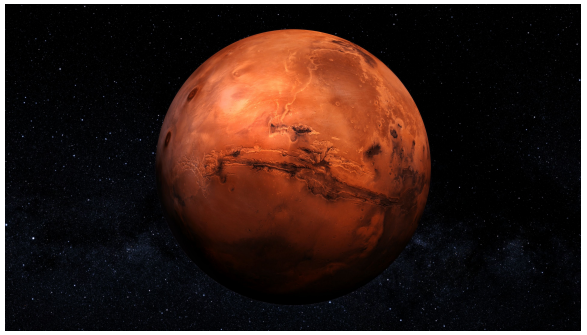


Expressions



```
SALES_TAX = 0.0712
SHIPPING = 7.99
total_before_tax = 1299.00


total = total_before_tax +
(total_before_tax * SALES_TAX) +
SHIPPING
print(total) #1399.48
```

Mars Weight



8-ball

Comparison Operators

```
num = 9

print(num == 9)    #True

print(num == “9”) #False

print(9 == “9”)    #False
```

Story time!

- Computers and technology are everywhere
- Logical problem solving
- Imagination
- Inspiration from other activities