Python, The Joyful Parts

Python is pure delight

- cool syntax
- superpowers
- no main function to begin with

C++

```cpp
#include <iostream>
using namespace std;


int main() {
    // code here

}
```

Java

```java
public class MyJavaProgram {

    public static void main(String []args) {
        // code here

    }
}
```

Python

```
```

Popularity

- Most wanted language 🍓
- `3rd` most popular
  if you remove html, css, sql and bash
  (1st js, 2nd Java)
- confirmed `3rd` by being 3rd loved ❤

source: SO survey 2018

Print yeah, but feature packed! 🚀 [1]

- normal

```
print(1)
```

- many

```
print(1, 2, 3, 4)
# 1 2 3 4
```

- different data types with no casting

```
print(1, 'a', [1, 2, 3])
```

Print yeah, but feature packed! 🚀 [2]

- cool control

```
print(1, 2, end=' ')
print(3, 4)
# 1 2 3 4
```

- even nicer

```
print(1, 2, 3, 4, sep='+')
# 1+2+3+4
```

Print yeah, but feature packed! 🚀 [3]

std output next door

- normal

```
print(1, 2, file=sys.stdout)
```

- redirect to file

```
print(1, 2, file=open('log.txt', 'w+'))
```

- since stram, IO concepts integrated

```
print(1, 2, file=open('log.txt', 'w+'), flush=True)
```

Variables, candy 🍭 enough to be mentionned here [1]

- multiple assignment

```
x, y, z = 1, 2, 3
```

- where py stands out

```
a, *x = 0, 1, 2, 3
# a -> 0, x -> [1, 2, 3]
```

- middle

```
a, *x, b = 0, 1, 2, 3
# x -> [1, 2]
```

Variables, candy 🍭 enough to be mentionned here [2] - variable swapping

- C++

```cpp
#include <iostream>
using namespace std;
int main()
{
    int a = 5, b = 10, temp;
    temp = a;
    a = b;
    b = temp;
    return 0;
}
```

- python

```python
a, b = 4, 5
a, b = b, a
```

Variables, candy 🍭 enough to be mentionned here [3]

- multiline string in variable without \n

```
x = """
<div>
    <a href="#">python.org</a>
</div>
"""
```

- same assignment

```
x = y = z = 0
```

Printing own file content, a two-liner 👓

- the 2 lines below prints the file content

```
with open(__file__) as f:
    print(f.read())
```