123 Coding Cards

Python 3
Beginners Level

Updated for Scratch 3 and the new EduBlocks edublocks.org
Getting Started
Before you get started with these cards, you need to make sure you’re all setup.

You will need:
- PC, Mac or iPad
- Internet Connection
- Web Browser

Scratch Setup
Go to scratch.mit.edu
Click on Create
You’re all setup!

EduBlocks Setup
Go to app.edublocks.org
Select Python
You’re all setup!

Python Setup
Go to trinket.io/python3
You’re all setup!
1: Say Hello!

**Scratch**
- say **Hello!** for **2** seconds

**EduBlocks**
- import time
- print(" **Hello!** ")
- time.sleep(2)

**Python**
- import time
- print("Hello!")
- time.sleep(2)

**How to run your code:**
- **Scratch**: Click the first block
- **EduBlocks**: Click the Run Button
- **Python**: Press Play

[edublocks.org](http://edublocks.org)
What is your name?

George

Hello George
123 Coding Cards

**3: Variables**

**Scratch**
- set score to 5
- say score

**EduBlocks**
- score = 5
- print(score)

**Python**
- score = 5
- print(score)

How to run your code:
- **Scratch**: Click the first block
- **EduBlocks**: Click the Run Button
- **Python**: Press Play

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1. **Scratch**
   - `set characters` to `length of apple`
   - `say characters`

2. **EduBlocks**
   - `character = len("Hello!")`
   - `print(character)`

3. **Python**
   - `character = len("Hello!")`
   - `print(character)`

**How to run your code:**
- **Scratch**: Click the first block
- **EduBlocks**: Click the Run Button
- **Python**: Press Play
1. **Scratch**
   - `forever`
   - `say Hello World!`
   - `wait 1 seconds`

2. **EduBlocks**
   - `import time`
   - `while True:
     print("Hello World!")`
   - `time.sleep(1)`

3. **Python**
   - `import time`
   - `while True:
     print("Hello World!")`
   - `time.sleep(1)`

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**How to run your code:**

- **Scratch**: Click the first block
- **EduBlocks**: Click the Run button
- **Python**: Press Play
1: Scratch

say pick random 1 to 6

2: EduBlocks

import random
print(random.randint(1,6))

3: Python

import random
print(random.randint(1,6))

How to run your code:
- Scratch: Click the first block
- EduBlocks: Click the Run Button
- Python: Press Play

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7: Addition Calculator

Scratch

1. ask First Number and wait
2. set no1 to answer
3. ask Second Number and wait
4. set no2 to answer
5. say no1 + no2

EduBlocks

1. no1 = int(input("First Number"))
2. no2 = int(input("Second Number"))
3. print(no1 + no2)

Python

1. no1 = int(input("First Number"))
2. no2 = int(input("Second Number"))
3. print(no1 + no2)

How to run your code:

Scratch: Click the first block
EduBlocks: Click the Run Button
Python: Press Play

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Hello from a function!

Def my_function:
    print("Hello from a function!")
my_function()
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**Scratch**
- `repeat 10`
- `change timer ▼ by ▼ 1`
- `wait ▼ 1 seconds`
- `say ▼ timer`

**EduBlocks**
- `import time`
- `for i in range(10):`
  - `print(i)`
  - `time.sleep(1)`

**Python**
```
import time
for i in range(10):
    print(i)
    time.sleep(1)
```

**How to run your code:**
- **Scratch**: Click the first block
- **EduBlocks**: Click the Run Button
- **Python**: Press Play

[edublocks.org](http://edublocks.org)
What is your name?

**George**

Happy Birthday To You

Happy Birthday To You

Happy Birthday To You

Happy Birthday Dear George

Happy Birthday To You

Happy Birthday To You

Happy Birthday To You

Happy Birthday To You

Happy Birthday To You