

## Students...

#### ARE COMPUTER PROGRAMMERS



## Students...

## Learn about Computer Programming

#### What does computer programming do?

- Nurtures creativity
- Solves problems

- LEARN TO CODE
- Teaches the computer to perform certain tasks
- Follows instructions
- And ...

# Many Everyday Things are Programmed by Code



### According to Steve Jobs:

"Everybody in this country should learn how to program a computer... because it teaches you to think."



### According to Mark Zuckerberg:

"In 15 years we'll be teaching programming just like reading and writing...

and wondering why we didn't do it sooner."

### Use Code to Write Computer Programs

Many different codes or

## PROGRAMMING LANGUAGES:

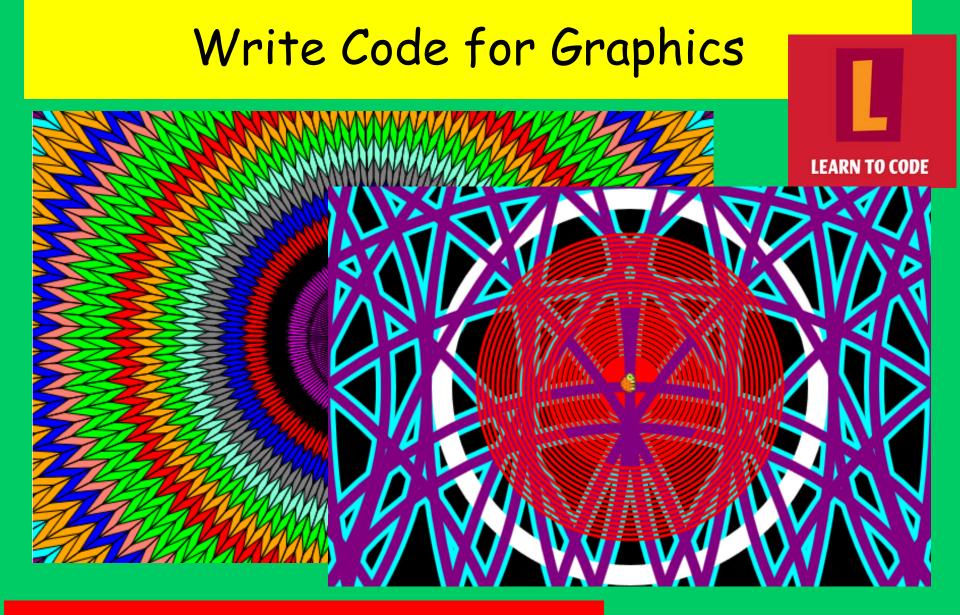
- Block
- LOGO
- Java Script



#### PROGRAMS Create:

- Graphics
- Games
- Animations
- Puzzles
- Websites
- And...





Some examples....

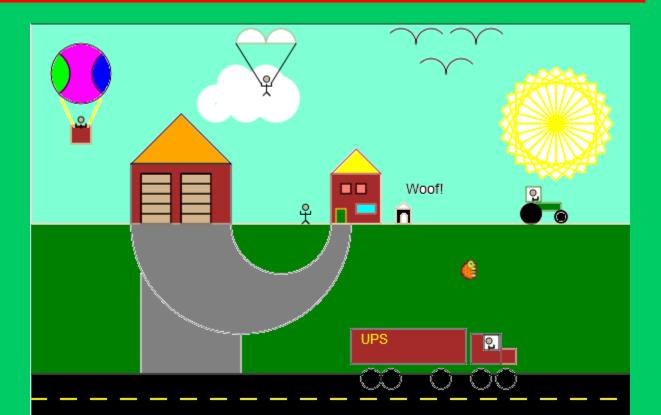
### Write Code for Graphics

```
l lt 90 fd 50 lt 90 fd 20 setcolor 3
2 repeat 750 [rt 90 repeat 4 [fd repcount * 3 rt 72 ] rt
 repcount1
3 setcolor 5 fd 20
4 repeat 750 [rt 90 repeat 4 [fd repcount * 3 rt 72 ] rt
 repcount]
5 setcolor 6 fd 20
6 repeat 750 [rt 90 repeat 4 [fd repcount * 3 rt 72 ] rt
 repcount]
7 setcolor 2 fd 20
8 repeat 750 [rt 90 repeat 4 [fd repcount * 3 rt 72 ] rt
 repcount]
9 setcolor 3 fd 20
0 repeat 750 [rt 90 repeat 4 [fd repcount * 3 rt 72 ] rt
 repcount1
 setcolor 5 fd 20
2 repeat 750 [rt 90 repeat 4 [fd repcount * 3 rt 72 ] rt
 repcount]
3 setcolor 6 fd 20
4 repeat 750 [rt 90 repeat 4 [fd repcount * 3 rt 72 ] rt
 repcount1
5 setcolor 2 fd 20
6 repeat 750 [rt 90 repeat 4 [fd repcount * 3 rt 72 ] rt
 repcount]
```

N TO CODE

### Write Code for Graphics

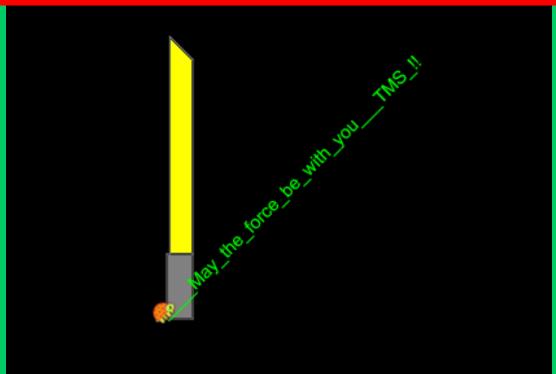
#### Let's see coding a drawing in action!





#### Write Code to Ask Questions

Change the Color of the Saber and see what message appears!





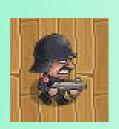
https://turtleacademy.com/view/programs/57168c74f45859536ac30204/en

#### Write Code for Games



LEARN TO CODE

- https://studio.code.org/c/201038980
- https://studio.code.org/c/201037066
- https://studio.code.org/c/201035440 \*
- https://studio.code.org/c/201031005 \*





- https://www.codeavengers.com/c/gkinney/persian\_cat\_ma nia
- https://www.codeavengers.com/c/ajamaitis/drews\_game \*
- https://www.codeavengers.com/c/cryan1/game\_dev\_1

## Students...

#### Create and transform graphics

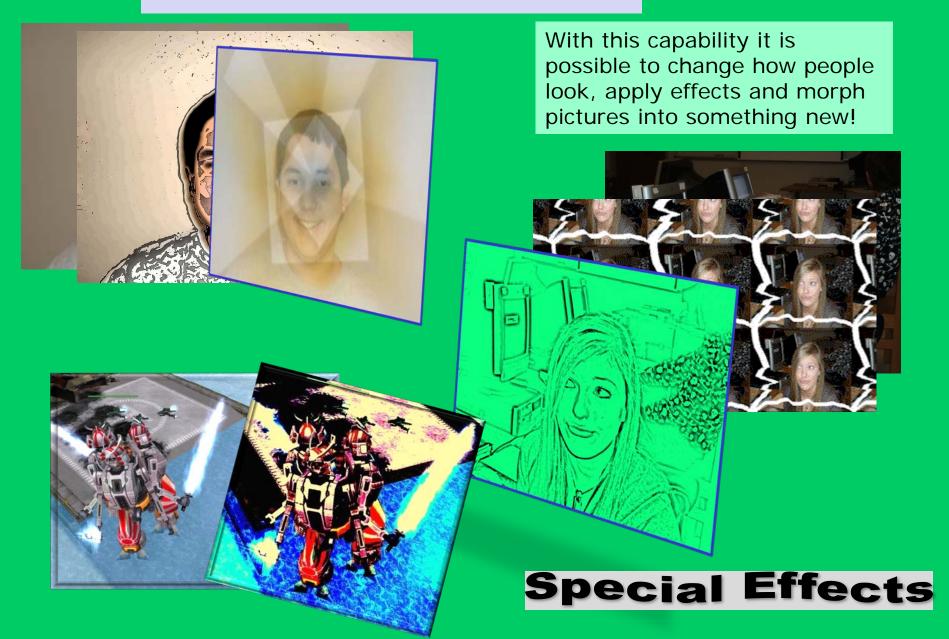
#### Share and publish in print or on the web

#### Use tools such as:

- Photo editing websites
- Adobe PhotoShop
- Audacity –audio editing
- Microsoft Movie Maker –video-editing

#### Some examples....

#### Transform Pictures



#### Web-based photo-editing tools

Change a portion of a photograph and .... see yourself all over the place!



media



# Can You Believe Everything You See?

## Cloning

Photo-editing technique to modify images



#### **Selection Techniques and Layers**



Dive right In!

New cover girls for Vogue?

Adobe PhotoShop



Mix it all UP!











**News-Breaking Stories** 



## Students...

Share their multimedia files, programs and video games with others

**Use creativity** 

Choose topics that interest them



TV shows

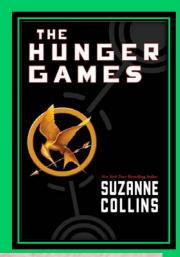


Video Games





**Sports** 



**Favorite Authors** 

#### In 8th Grade

## COMPUTER CLASS!



### See YOU next year!

