CSC 111
Introduction to Computer Science

Dominique Thiebaut
Spring 2015

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Today:

- Class Web Page: http://tinyurl.com/1112015
  
  - Syllabus
  
  - Piazza
  
  - Moodle
  
  - Python & Idle
  
  - Waiver forms & Registration
Syllabus

- http://tinyurl.com/1112015
- http://cs.smith.edu
- faculty
- D. Thiebaut
- more info
Please answer the Survey!

Strongly agree
Agree
Disagree
Strongly disagree
CSC111: Amount of Work

Level of Difficulty

Semester
CSC111: Amount of Work

Your level
This week…

Level of Difficulty

Semester

Your level
Goals for this Week

- Learn how to use **Idle**
- Write simple programs that use **variables, for loops, and output** information
- **Install** Python and Idle on laptop (optional)
- Learn how to **submit** Python programs to **Moodle** (lab+homework)
- Do **Lab #1** and start on **Homework #1**
Reading

• Read **Chapter 1** in John Zelle's *Python Programming*, up to Section 1.7 included
What is a Programming language?
Important Concepts…

• **Syntax and keywords**

  and del from not while as elif global or with assert else if pass yield break except import **print** class exec in raise continue finally is return **def** for lambda try

• **Algorithm**

• Python is an **interpreted** language
Interpreted vs. Compiled vs. YouTube
An Example Program
# A simple program taken from Zelle, Chapter 1  
# D. Thiebaut

```python
def main():
    print( "This program illustrates a chaotic function" )
    x = eval( input( "Enter a number between 0 and 1: " ) )
    for i in [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]:
        x = 3.9 * x * ( 1 - x )
        print( x )

main()
```

# A simple program taken from Zelle, Chapter 1.1
# D. Thiebaut

```python
def main():
    print( "This program illustrates a chaotic function" )
    x = eval( input( "Enter a number between 0 and 1: " ) )
    for i in [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ]:
        x = 3.9 * x * ( 1 - x )
    print( x )
main()
```

**INDENTATION IS IMPORTANT**

**COMMENT**

**DIFFERENT COLORS:**

**SYNTAX HIGHLIGHTING**

**SPECIAL TOOL:**

**EDITOR IDE**
Integrated Development Environment = IDLE
Integrated Development Environment = IDLE
Integrated Development Environment = IDLE

(MAC)
Integrated Development Environment = IDLE

(Windows)
DEMO TIME!

```python
# A simple program taken from Zelle, Chapter 1
# D. Thiebaut

def main():
    print("This program illustrates a chaotic function")
    x = eval(input("Enter a number between 0 and 1: "))
    for i in [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]:
        x = 3.9 * x * (1 - x)
        print(x)

main()
```
Concepts to Cover in Demo

- **Console** vs. **Edit window**
- **Variables**
  - numbers: **integers** and **floats**
  - text: **strings** of characters
- **print** function
age = 20
gender = 2015
yearBorn = year - age

print( "you are", age )
print( "you were born in", yearBorn )

name = "Alex"
college = "Smith College"
print( name, "goes to", college )

for name in [ "Lea Jones", "Julie Fleur", "Anu Vias" ]:
    print( name )
    print( "-------------" )
Registering Wait-Listed Students

• If you are already registered, you can leave!

• Priority rule for wait-listed:
  • Max number per lab section: 25 students
  • 1) EGR majors (CSC111 required)
  • 2) Follow natural order in wait-list