

EM&CP Block Monday, January 24, 2022

# (#1) Understand the problem

temperature converter  
Convert  $^{\circ}\text{C}$   $\rightarrow$   $^{\circ}\text{F}$

## (#2) Determine Specifications

input:  $^{\circ}\text{C}$   $\rightarrow$  ( $^{\circ}\text{F}$ )  $\rightarrow$  output  
formula  $\frac{9}{5}^{\circ}\text{C} + 32^{\circ} = ^{\circ}\text{F}$

## (#3) Create a Design pseudo code

pseudo code

tell user what's happening

create an algorithm

Set temp, °C

Convert °C → °F →  $\frac{9}{5} °C + °F$  ✓

Report to user °F temp

Implement the Design

print("\_\_\_\_\_")

input

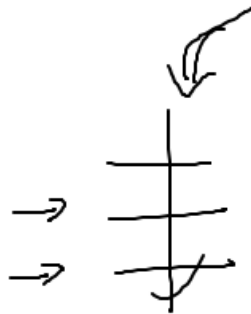
$$°F = \frac{9}{5} °C + 32$$

print(

# In Processing..

print → Causes print but keeps  
"print pointer" on same line

println → Causes print but advances  
"print pointer" to a new line

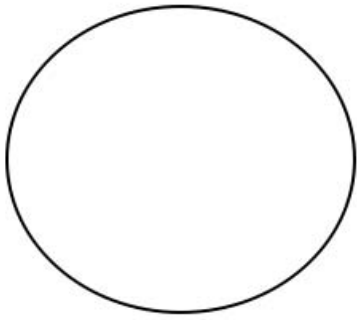


python

get someone's first name then

Hello name . Welcome to EM&CP!

'What's your name'



$$\pi r^2 \xrightarrow{3.14159} \text{area}$$

$$2\pi r \xrightarrow{\quad} \text{perimeter}$$

input: circle  
radius

Compute — area

— perimeter

report (print) both back for user

output: (1) circle area

(2) circle perimeter

$$r^2 \equiv \overbrace{r * r}^{\text{pytho}} \text{ or } r^2$$

$$\overbrace{r ** 2}$$