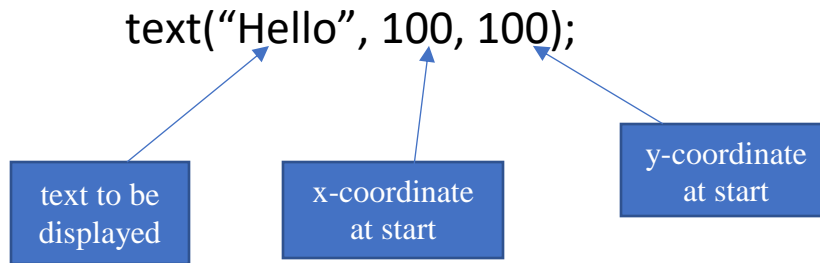


6-Unit 2 L 3– Typography and Drawing text

Syntax : PFont, loadFont(), textFont(), text() textSize(), textLeading(), textAlign(),textWidth()

Letters on screen are created by setting the color of pixels. The format used by Processing (VLW) stores the font as images in a separate folder inside the data folder for your application.

The command to display any given text on the Graphics Console is:



This command will provide a basic white text with default size. *Words or numbers can be displayed.*

If a different font size, type is desired it must first be included in the current sketch. Before use the font **must be loaded**. To **load** a font follow these steps:

Step 1:

Go to **Tools->Create Font->**(Select font from the list of available fonts)->OK
To confirm the font is loaded click on the Sketch menu and select "Show Sketch Folder".

Step 2:

Processing has a **unique data type called PFont** to store font data.

Make a new variable of the type PFont and use the loadFont() function to load the font.

PFont font; // Declare the variable

font = loadFont("Algerian-48.vlw"); // Load the chosen font , with the size defined at load time

textFont(font); // Set the current text font

fill(0); // sets the color and transparency of the letters; stroke() does not have an effect on font.

text("something to say", x, y, width, height)

- The stringdata parameter can only be a String.
- The x and y parameters set the position of the lower-left corner.
- The optional width and height parameters set boundaries.

Exercise 1

Type the following code in a new sketch. Show the output in the space provided.

A. Type in a new sketch:
`setup(800,500);`
`text("This is easy",100,200);`

This is easy
This was white and
somewhere in the left near the

B. Replace the text line only with:
`text(12345, 200,300);`

12345
This was also white and somewhere on
the left near the middle, lower and closer
to the centre than the first one though

C.
`PFont font;`
`font = loadFont("Algerian-48.vlw");`
`textFont(font); // Set the current text font`
`fill(23,35,250);`
`text("Hello", 200,200,300,300);`

Hello
This was bigger than the last two
and is kind of in the middle in terms

D. Replace the text line with:
`text("Hello", 200,200,30,50);`

There is nothing

What is the effect of width and height coordinates on the output? They widen or grow the text box so the output can fit inside it.

Additional text related functions(methods) syntax.

Processing provides additional functions which control the way text is displayed.

A. Modify size

`textSize(size);` // size can be any valid font size such as 18 or 12

B. Spacing between lines

`textLeading(dist);` //The dist parameter defines this space in units of pixels.

C. Alignment

`textAlign(MODE);` // The MODE parameter can be LEFT, CENTER, or RIGHT

D. textWidth();

// Measures the width of text

Exercise 2 Different way to use a font is to “create” rather than “load”. Do NOT follow the steps to load a font.

Type the following code in Processing. Show in the output in the box provided.

```
PFont font;
void setup(){
  size(800,500);
  font = createFont("Algerian",48);

  textFont(font); // Set the current text font
  char c = 'U';
  float cw = textWidth(c);
  text(c, 22, 81);
  rect(22, 42, cw, 5);
  String s = "UC";
  float sw = textWidth(s);
  rect(22, 78, sw, 5);
}
```

There is a big white U in the specified font with what I think is the normal thickness. Two rectangles border the top and bottom, both filled with white, bordered with black, and the same thickness. The top one is the width of the U and just above it, the bottom one overlaps with the bottom of the U and seems to be double the length.

Text Art Assignments

Working in pair complete any 2 of the 3 assignments listed below. A plan must be signed by the teacher prior to using a computer.

1.Favorite quote.

Your design must include a quote from: a famous individual, a movie, or a song.

You are only allowed to use text and simple shapes, like squares, circles and triangles.

2. Word Art poster. On a canvas size 800 by 500 design a word poster representing your own personality, likes and dislikes and world causes you support

DUE: Quote Due Dec 10; Word Art Due Dec 14

Use the boxes below to sketch / draw plans for each of your designs. Be sure to include all colour / image / text ideas to help assist your production. Once complete, have the teacher sign your plans for completion so you may begin work. TEACHER SIGNATURE _____

Plan:

Typography Assignments Evaluation Rubric

Text Art KNOWLEDGE / UNDERSTANDING/APPLICATION	EVALUATION SCALE									
	Very Poor		Poor	Satisfactory		Good		Excellent		
Requirements: size correct / instructions followed/program design as taught. Variable names and comments appropriate/adequate	1		2		3		4		5	
Layout: seamless / clean edges / emphasis on prioritized elements	1		2		3		4		5	
Shapes use: high quality / appropriate to purpose / use demonstrates skill	1		2		3		4		5	
Text: font choices enhance design / appropriate to purpose / font colour / size / text use demonstrates skill	1		2		3		4		5	
Processing Skills: Work demonstrates strong use of Processing syntax / style/conventions. includes a variety of skills / advanced skills included	1	2	3	4	5	6	7	8	9	10
EVALUATION KNOWLEDGE /APPLICATION										
	30									

Planning - THINKING / INQUIRY	EVALUATION SCALE				
	Very Poor	Poor	Satisfactory	Good	Excellent
Planning : complete / submitted by deadline / represents all ideas / signed by teacher / assists production	1	2	3	4	5
Submission : completed plans / rubric / work submitted by deadline provided / resources and worksheets submitted as required	1	2	3	4	5
EVALUATION THINKING / INQUIRY					
	10				