

# PYTHON LIBRARIES

## WHAT IS A LIBRARY AND HOW TO USE IT?

A library (or module) is a **set of functions provided by another developer** which you can use in your own program. You need to **import a library** to use it.

## THE RANDOM LIBRARY

Random is a library containing many functions to generate random numbers or shuffle arrays.

```
from random import shuffle
students = ["Chanthy", "Bunthoeun", "Sreyleak", "Nika", "Sambo"]
shuffle(students) # change the order of elements in array
```

```
from random import randrange
print(randrange(0,100)) # random number between 0 and 100
```

## TKINTER LIBRARY

Tk is a library containing code to create graphic interface. The frame uses a (x, y) positioning system with (0,0) at the top left.

The canvas element is used to draw shapes, lines and text.

You can use optional parameters to customize the colours of fill, outline or text. If you don't specify optional parameter, TK will use a default value.

```
canvas = tk.Canvas(frame)
canvas.create_rectangle(x1, y1, x2, y2)
canvas.create_oval(x1, y1, x2, y2, fill="#FFFF00", outline="#FF0000")
canvas.create_line(x1, y1, x2, y2, fill="red")
canvas.create_text(x1, y1, text="Just do it")
```

