

Lab Assignment 0

Python environment setup

COL100

November 28, 2021

1 Getting familiar with Python environment

The programming component of the course will be based in Python language. For faster and easier setup of the environment, we will be using a web-based python environment. This will avoid any installation of libraries and module in your devices, and you can directly focus on writing programs.

1.1 PythonAnywhere

1. Open [PythonAnywhere](#) in your favourite web-browser
2. Click on "Pricing & singup" in top right corner and create basic account. Refer Figure 1

Send feedback · Forums · Help · Blog · Pricing & sign up · Log in

pythonanywhere

Plans and pricing

Beginner: Free!

A limited account with one web app at your-username.pythonanywhere.com, restricted outbound Internet access from your apps, low CPU/bandwidth, no IPython/Jupyter notebook support.

It works and it's a great way to get started!

Create a Beginner account

Education accounts

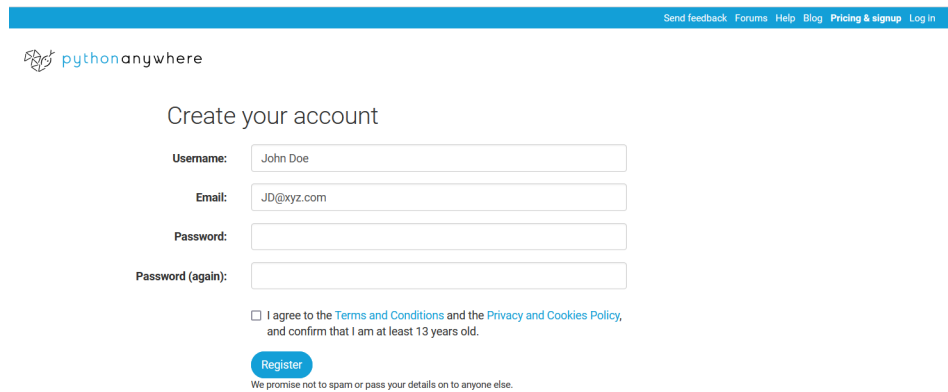
Are you a teacher looking for a place your students can code Python? You're not alone. Click through to find out more about our [Education beta](#).

All of our paid plans come with a no-quibble 30-day money-back guarantee — you're billed monthly and you can cancel at any time. The minimum contract length is just one month. You get unrestricted Internet access from your applications, unlimited in-browser Python, Bash and database consoles, and full SSH access to your account. All accounts (including free ones) have screen-sharing with other PythonAnywhere accounts, and free SSL support (though you'll need to get a certificate for your own domains).

Hacker	\$5/month	Web dev	\$12/month	Startup	\$99/month	Custom	\$5 to \$500/month
Run your Python code in the cloud from one web app and the console		If you want to host small Python-based websites for you or for your clients		Start a business and don't worry about having to scale to handle traffic spikes		Want a combination that's not on the list? Create your own! All custom plans have:	
A Python IDE in your browser with unlimited Python/bash consoles		A Python IDE in your browser with unlimited Python/bash consoles		A Python IDE in your browser with unlimited Python/bash consoles		A Python IDE in your browser with unlimited Python/bash consoles	
One web app on a custom domain or your-username.pythonanywhere.com		Up to 2 web apps on custom domains or		Up to 3 web apps on custom domains or		Up to 20 web apps, on custom domains or	

Figure 1: Account creation

3. Enter the relevant details to create the account. Refer Figure 2



The screenshot shows the PythonAnywhere website's account creation interface. At the top, there is a blue navigation bar with links for 'Send feedback', 'Forums', 'Help', 'Blog', 'Pricing & sign up', and 'Log in'. Below the navigation bar is the PythonAnywhere logo. The main heading is 'Create your account'. There are four input fields: 'Username' (containing 'John Doe'), 'Email' (containing 'JD@xyz.com'), 'Password', and 'Password (again)'. Below the password fields is a checkbox for agreeing to the 'Terms and Conditions' and 'Privacy and Cookies Policy', with a note that the user must be at least 13 years old. A blue 'Register' button is positioned below the checkbox. At the bottom, there is a small disclaimer: 'We promise not to spam or pass your details on to anyone else.'

Figure 2: Enter details

4. Follow the guide to understand the different interfaces in the dashboard. Refer Figure 3

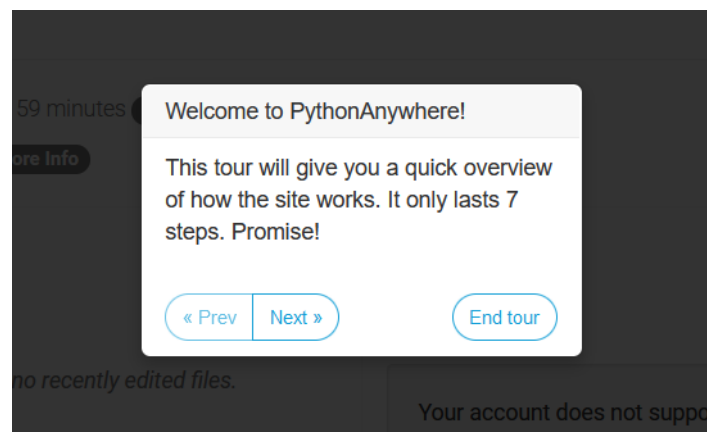


Figure 3: Dashboard guide

5. Create new file as shown in Figure 4. A suggestion is to use the file path as `"/home/<username>/first_program.py"`. Here, `"*.py"` signifies that we are creating python program file. Click on "New file" to confirm.

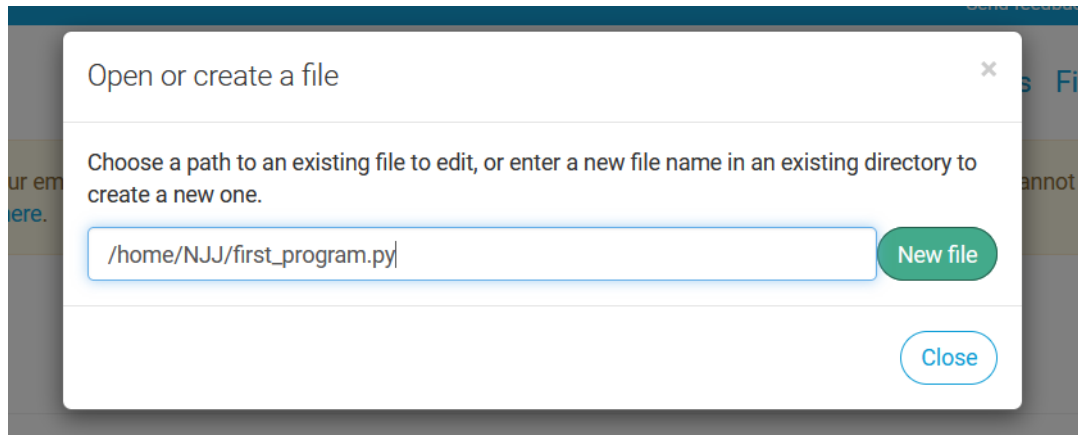


Figure 4: Create new file

6. After creating the new file, you will be directed to editor window. Write the code to print "Hello World" as shown in Figure 5. Save the file and click on "Run this file".

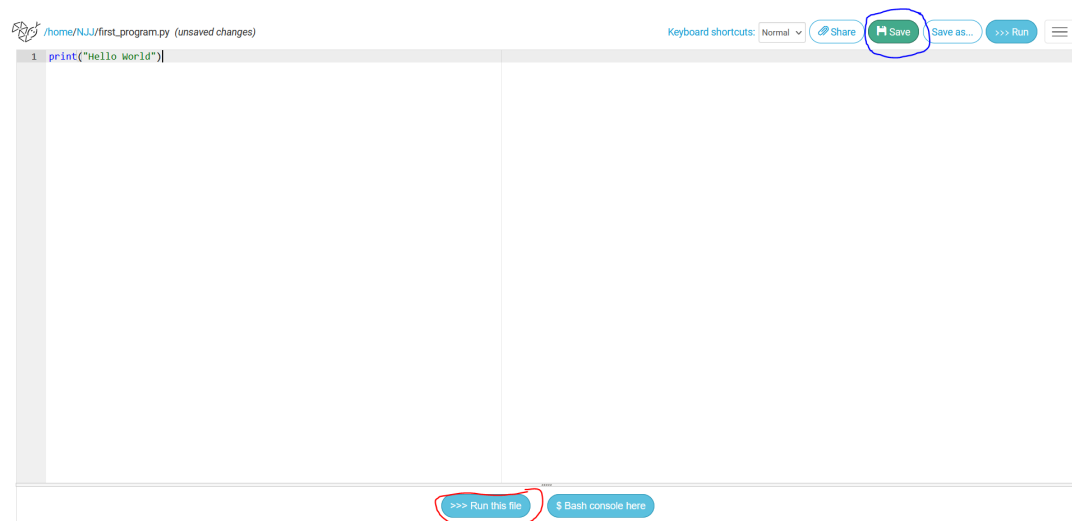


Figure 5: Hello World program

7. Upon successful compilation, you should see a "Hello World" printed in the python console. Refer Figure 6.

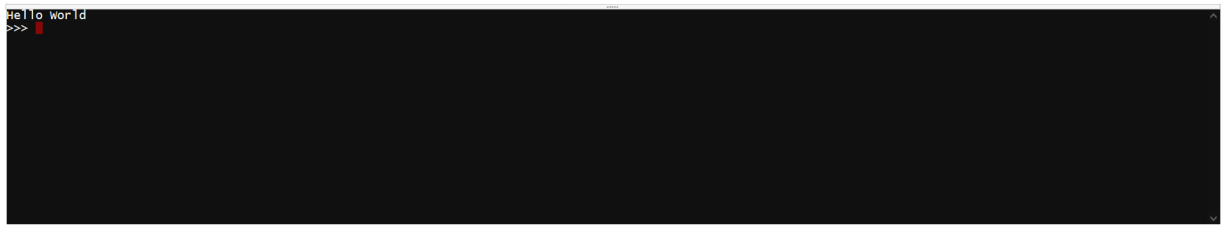


Figure 6: Hello World program

1.2 CodeSkulptor

1. Open [CodeSkulptor](#) in your favourite web-browser.
2. Write the code for printing "Hello World" under the "Code" window pane. Refer [7](#)

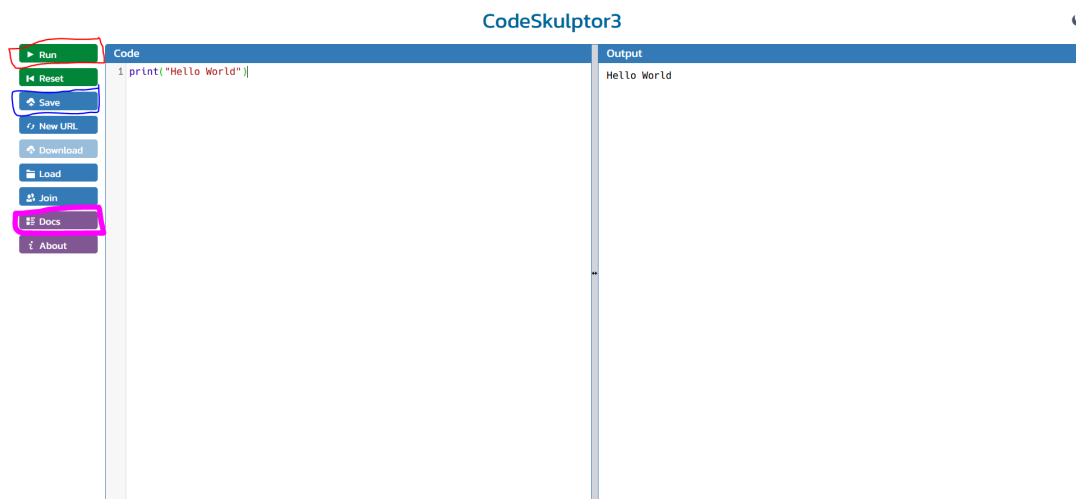


Figure 7: CodeSkulptor3 window

3. "Run" button highlighted in red will execute the written code and output will be printed under the "Output" window pane.
4. You can save your code using "Save" button highlighted in blue.
5. Refer to docs to check the basic types and operation supported by python

2 Task and Submission

After becoming familiar with python environment and writing "hello world" program, your task is to modify the above program to print **Your Name** and **Roll Number**. You need to submit the screenshot of the code and the output. While taking the screenshot, the whole browser window should be visible.