Session 1: Assignments

1

* How to check a variable’s type?

Using a function called type

* In what cases, you will get ***SyntaxError*** from the compiler telling you that some of your variables have **invalid names**? Can you give 3 different examples of **invalid names**?

In case they don’t begin with a letter or an underscore or using one of the Python keywords.

For example:

>>> 1511birthday = “Cris Pham”

>>> $uper$tar = “Illenium”

>>> True = “Wir sind Venom”

1. Write a program that calculates the **area** of a **circle**. The circle radius is entered by users.

Expected screen output:

|  |  |
| --- | --- |
| https://lh6.googleusercontent.com/-0mLznkGTdSl5mrP3EJE9YyDy4JrVIxxG7XIvZlOtn82ZhRxU7DmnabPB4fhZbguX3d0Ggr3RoMe1fj7kgkkCVZjllzn05XobLBdWv93QbWlxbh3QVBN1_LUhbZfDt3SkVjPpZahiQW9sHHfQQ | https://lh4.googleusercontent.com/5YW3imdn6Rxe4LM7Mz0YvV7mw9lKjczhrIVLH2wD5j5bNjkSIfasN-yyrlo_bUFRNER-aTYt-VNfxYXOQLyL0bOvwB91PpReBChgCNH7j43k6g8uJqa_ThHxs-42GJpatxTM8vEDA03KRM-RaQ |
| # This one is fine | # This one is a little bit better |

1. Write a program that converts **Celsius** (0C) into **Fahrenheit** (0F)

Expected screen output:

|  |  |
| --- | --- |
| https://lh3.googleusercontent.com/QsQkcuYi5RrYT7p5CrUs84qsK7xP6WG33XBnpokHYWlqY13M6BudyuCo7z90_k5y8354Qu0eqhz1m4ZnWhhYQ816wi-hMSMO4gO7WD4yuIJ6zyIl-yV3c0EkCEH2KnRsWNzz_kRhNTQ7t7eLuA | https://lh6.googleusercontent.com/d1nfTlFVuQg4f2LqhRAXW-iPGvcWI5tZ6ouqu8xbXxDUg0q5qIRU0O2Ro-jMlMbkaUbV9Id-gWB4Hcdh5j7GajgrFf2CgT88CohM5kSGdm-8Fp3QTboZDtb5IOzLD6zbugRl2Qzp1B7OkKvF5g |
| # This one is fine | # This one is a little bit better |

|  |  |
| --- | --- |
| *http://www.bestappsforkids.com/wp-content/uploads/2012/04/save-turtle.png* | ***Turtle exercise*** |

Use Python Turtle to draw the following shapes

|  |  |
| --- | --- |
| 1. **A square**   https://lh6.googleusercontent.com/9k0hrPMKatcybF_cHN-fAOLZdGZwJs6SLGkU74aU3A2GQy7lHyyhh70pwoTX78jtoLuY8QJMH5XzjE7LG_XwCd3lVwZqrdTTL3HI5aEcT8Y4caYpn2aWZyBniz46QVRVl0CvLdQH | 1. **An equilateral triangle**   https://lh4.googleusercontent.com/BSS_Mi90waGjcTMg10_73HEzyIDworOkmKFYiqOBdF82mW4DZokwPamKjG6okT3aspNypJyuq0jFfrmfTnihABtgnCgIb9pyVAZ2C8RvUcRKwcJ4_oZcK_6jQSTiwi_8QjqRtxJ- |
| 1. **A circle (Hint: Google “*Python Turtle Circle*”)**   https://lh6.googleusercontent.com/aF2B_22OYmTi2dJxijne9wdNzOsW80d0d1x-HH08nsch5zOWX8RF4UMFVW9v46jYuMHTTF9lPYRn0C7ddP9PEP4nvHLYA8t3rFgiwZOnqYIo3TsOZA1mSHymKowuH7mGDoJUYU5_ | 1. **Multi-circles**   https://lh5.googleusercontent.com/UwOIjMobT6me5F2dOzlnWxuJNWSy2VeuOGJ3Hd1G90edz6ysJaXo55vNdyD0Di2OTk2oCehkx1y93xWkyJdyRdaM9AbGemGiYaLgdmlgAzQ2WiUKKQUMI3bgmGqKiAc3SlJv0qVn  Or even better:  https://lh5.googleusercontent.com/qTIIKL8NHUJ_zFjo-rg9BR5Q2LkMLE2hfEK7eLcOepW9-kUYYMzP-jajEK_el6fn3CZgqozYuHOsQtSaHZX5tVq0pjx9I95-JDowsAPr07rD1fbNJ9yo-tsGe2RakgbhysP6Bf83 |