

A level Computer Science

Introduction to SQL – database language

<https://www.w3schools.com/sql/>

Task 1: Work through the tutorials on the left hand side of the webpage:

SQL Intro to SQL Comments

Take the SQL quiz and print out your result.

[SQL Tutorial](#)

Task 2: Follow the Java tutorial and complete its quiz and print out your result.

Optional:

[Java Tutorial](#)

Task 3: Python Programming- Fibbing

Create a program that will calculate the Fibonacci sequence to 10 places.

Extensions:

1. Allow the user to specify the number of places generated
2. Print this in reverse order
3. Display the total of all the numbers shown

<https://www.online-python.com/>

<https://www.python.org/>

Task 4: Python Programming- Hack-proof

Create a program that will only open a text document if the correct password is entered.

The user should choose the username and password first and it should also verify the password before allowing it.

Extensions:

1. Create a random password first of at least 8 characters first as a suggested password
2. Create a random password that contains at least a lowercase, uppercase and special character of at least 8 characters in length
3. Verify that the password given by the user matches:
 - a. The limits in Extension 1 above
 - b. The limits in Extension 2 above

<https://www.online-python.com/>

<https://www.python.org/>

Collate all your answers in ONE file (PDF, MS word, or PPT) and upload it to the following link

<https://forms.office.com/e/XwrzhaAYiV>