

As level - Computer Science Bridging Work

Task 1 - Research: The components of a desktop PC

Evidence: Poster

Expected time commitment: 2 hours

List all the internal (eg; motherboard) and external (eg; monitor) components you will need to run a desktop PC. Include descriptions of the function and an image of each component. A3 looks better and you can fit more on.

Task 2 - Skills: Programing Basics

Evidence: Print screen evidence of attempted exercises.

Expected time commitment: 5 hours

Complete the “Learn the Basics” python tutorials for the interactive website below. Read the theory, run the code, alter the code and re run it, then try the exercises.

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

Learn the Basics

- Hello, World!
 - Variables and Types
 - Lists
 - Basic Operators
 - String Formatting
 - Basic String Operations
 - Conditions
 - Loops
 - Functions
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Task 3: Critical Views

Expected time commitment: 2 hours

Evidence: Report the length of a single A4 side

Answer the three questions listed below. This requires critical thinking – this means to see things from different perspectives and to evaluate good and bad aspects. Can you do this and link ideas together.

- **What is computer science?**
 - **Why is computer science important to society?**
 - **Why do you wish to study Computer Science?**
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Task 4: Super curricular

Expected time commitment: 136 minutes

Evidence: provoking thoughts

Watch the motion picture “The Matrix”. Think about all the aspects of this movie that relates to computer science.



Task 5: Java

- Expected time commitment: 2 hours
- Java is one of the older programming languages developed by Sun Microsystems and released in 1995. Java runs on a variety of platforms, such as Windows, Mac OS, and the various versions of UNIX. We will begin by completing a range of tutorials on codecademy in order to gain some experience in the java programming language.

- Click on the link below, ensure that you are using google chrome.
- Complete tutorials 1-12
<https://www.codecademy.com/learn/learn-java>
- Obviously this is just an introduction.
- You will need much more practice to develop the skills that you need to develop a complete program for your programming project.
- [Create a 6 slide presentation of the key skills that you have acquired.](#)

- Go through these tutorials for extra practice.
- This tutorial gives a more detailed understanding of Java.
- <http://www.tutorialspoint.com/java/>