



Wallington High School for Girls

Sixth Form

Subject: Computer Science

Exam board: OCR

Course information: This is a linear course, meaning all content is examined at the end. Your A-level grade will depend entirely on your performance in the exams you take at the end of Y13, which will cover all of the content you are taught in both years, and your NEA.

Component 1 – Computer systems – Written Paper

40% of total A Level

Component 2 – Algorithms and Programming – Written Paper

40% of total A Level

Programming project – 20% of total A level

Summer Transition Work: Create a Python-based quiz game that asks the user a series of questions, checks their answers, and gives them a score at the end. Use subroutines in your code.

Core Features (Required)

- Welcome Message
- Greet the user and explain the rules.
- Question Bank
- Store at least 5 questions and answers (use lists or a list of tuples).
- Ask Questions
- Loop through the questions and get user input.
- Check Answers
- Compare user input to the correct answer (case-insensitive).
- Score Tracking
- Keep track of how many answers were correct.
- Final Score
- Display the user's score at the end with a message.

Extension tasks:

- Multiple Choice Format
- Present 3–4 options for each question.
- Randomized Questions but prevent same questions being asked multiple times in one session.
- Shuffle the question order each time the game runs.
- Timer
- Add a countdown timer for each question using `time.sleep()`.
- Categories
- Let the user choose a category (e.g., Maths, Science, General Knowledge).
- Leader board
- Save high scores to a file and display them.
- GUI Version - Use tkinter to create a graphical version of the quiz.
- Sound Effects - Use the playsound module to play sounds for correct/incorrect answers.

Approximate completion time: 2 - 4 hours with most of the extension tasks

Suggested Summer Wider Reading: "Hello World: How to Be Human in the Age of the Machine" by Hannah Fry ISBN number: 0857525247