The King James's School
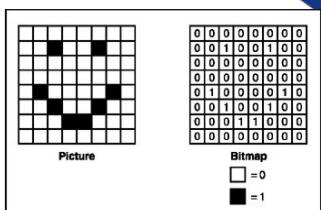# Computing & IT Learning Journey

Question: How do you draw a square using a For loop?

```
for i in range(4):
    t.forward(100)
    t.right(90)
```
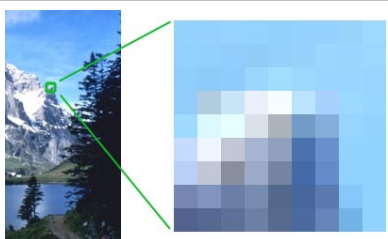
Kudu Game Design

Microbits & Robotics

Visual Python Programming

Question: What is a DDoS Attack? **A botnet used to flood a network.**

Question: What is a Hostile Actor? **They include foreign states, criminals, "hacktivist" groups and terrorists that carry out cyber attacks.**

Networks & Internet

Question: How are images represented on a computer? **Pixels**

Picture — Bitmap — 0=0, 1=1

HTML & CSS Web Design

Creative iMedia

Cybersecurity

Question: How is data sent across the internet? **Broken up into Packets**

Image Representation

Question: What does HTML stand for? **Hyper Text Mark-up Language**

web design

Question: How do you make decisions in a program? Using IF statements

```
if password = "12345678":
    print("Weak password!")
```
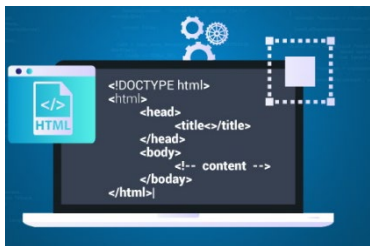
Advanced Photoshop Skills

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Enterprising Project

Python Programming

Computational Thinking

What does HTML stand for? Hyper Text Mark Up Language

Who is the person famous for cracking the enigma code? Alan Turing

E-safety & Digital Footprints

HTML

Mission to Mars NASA Project

Codebreaking & Bletchley Park

Binary

Logic Gates

What is encryption? **A way of scrabbling a message**

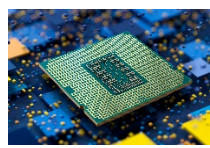What is an algorithm? **A set of instructions to solve a problem**

Spreadsheets

Pixel Art Animation

8

Enterprising Project

Flowcharts

Who is the person famous for being the first computer programmer? **Ada Lovelace**

```
>>> print("Hello World!")
Hello World!
>>>
```

What is the brain of the computer? **CPU**

Ascii Character Set

Spreadsheets

Photoshop Banner

Python Programming

Binary

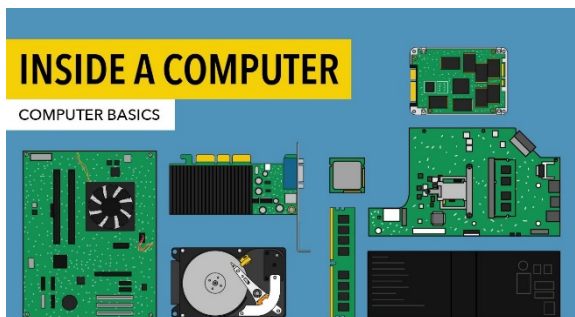Decimal to Binary

75 → 1001011
142 → 10001110
339 → 101010011
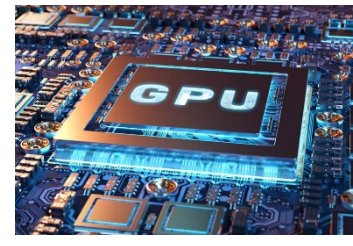
Inside my Computer

Scratch Programming

Touch Typing

File Management, Email & OneDrive

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INSIDE A COMPUTER
COMPUTER BASICS

forever
imagine
program
share

SCRATCH

OneDrive

The King James's School
GCSE CSc Learning Journey

Environmental & Ethical Issues
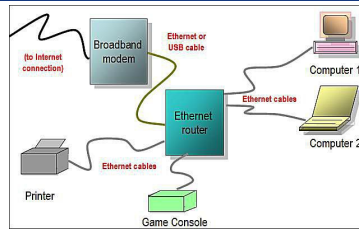
Computers and the Law – Legal

Algorithms

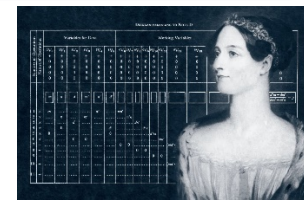Practical Programming Skills

System Software

Operating Systems, Applications and Utilities
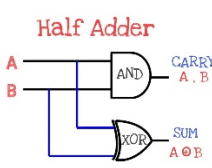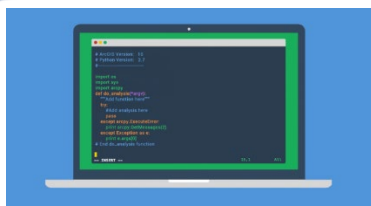
Producing Robust programs

Protocols and the Internet

How Networks work together
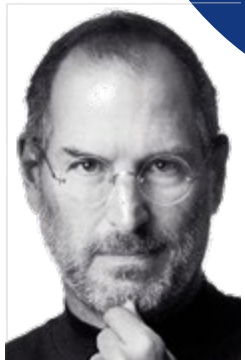
HTTP

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Additional Programming Techniques

Boolean Logic

Half Adder

Programming Languages

Network Security Threats & Prevention

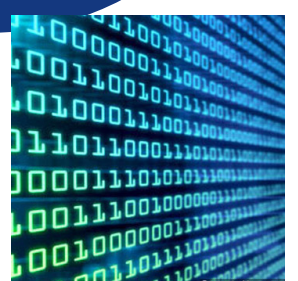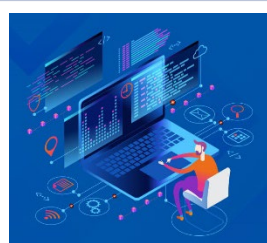Computational Thinking

Binary & Characters

VIRUS DETECTED

Network

Storage Devices HDD, SSD, Optical

Programming Fundamentals

RAM & ROM

Programming Fundamentals

System Architecture How does a CPU work?

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