What instructions must be issued to obtain a soda from the first machine and a bar of chocolate from the second?

First vending machine, you press the large icon with the image of drink you want (pay first) which will drop a drink.

Second vending machine, you pay then put in a combination of a letter and numbers, if you wanted a kitkat it would be E > 4 and the kitkat would drop down

Why has it been necessary to design a more complex mode of interaction for the second vending machine?

As there is such a diverse choice of items a more logical method of interaction has been chosen which allows for a more intuitive way to select an item opposed to counting all the way to the kitkat. Rows are alphabets and columns are numerical values.

Why has it been necessary to design a more complex mode of interaction for the second vending machine?

Research into three different products/app/websites etc. and think about what Paradigms, Visions, Theories, Models or Frameworks they follow.

What similarities do they share and why?

Smartphones – somewhat the same with similar processors (SnapDragons) except apple which uses the A# Processors. Each company changes the overall appearances but fundamentally the same. Some have features like an AI such as Bixby or Siri which perform tasks when spoken to.

Web browsers – web browsers all do the same, which is crawl the internet to index pages and retrieve them for you. They all have different views or searching methods etc. and features but all systematically work the same