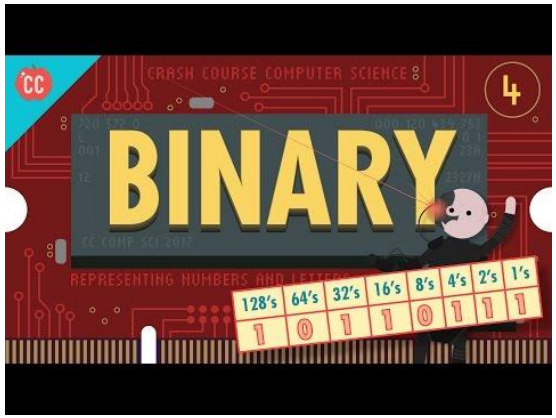
Red, Green and Blue

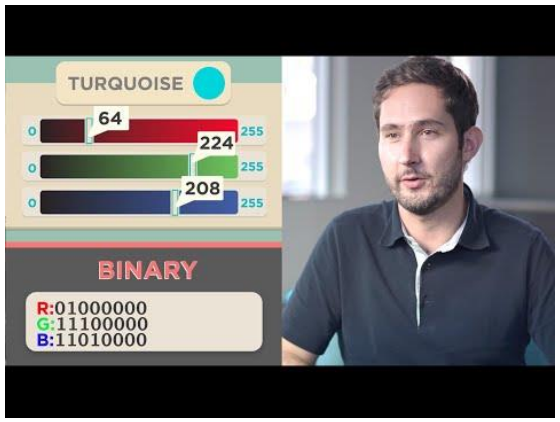
How we see colours represented in real life compared to a digital system is different. RGB stands for the three main colours that are used digitally - Red Green Blue. RGB is an acronym to help describe how we see digital colours and images.

All data in a digital system is represented using whole numbers – binary code. This includes images and colours. An image on a digital screen may look sharp when you have zoomed out but when you start to zoom in, the image starts to look blurry There's a reason for that! You're no longer looking at the whole image but tiny individual squares. A digital image is made up of pixels (squares). Within each pixel there are rectangles that are made up of three colours – red green and blue. All digital imagery is made from those three colours. The change in colour will depend on the value of the red green and blue. If you wanted to create black, all the values (the red, green and blue) will be set at 0. If you wanted to create white the red, green and blue's value will be set at 255. The lower the numbers are darker colours, high numbers are brighter colours. The three colour combinations can make millions of colours! The value of the RGB is stored in a digital system as a bit. The black we spoke about before will be stored as 00000000. To store white – all the values (found in red green and blue) are stored as 11111111. As the colours change so do the 0 and 1s represented in red, green and blue.

Click on the images to watch these videos that further explain Binary and RGB



Video Source: Crash Course Computing



Video Source: Code.org