Flowcharting 2: Practice Work

NOTES:
- Remember, you can easily create digital flowcharts using the website **draw.io**, just remember to "export" as a png image for submission purposes
- Do not use any language specific items or terminology.
- When asking for data you must have a prompt and read statement for EACH input value

Task:

Create a Flowchart for the following programs:

1. Create a program that asks and stores the current mark of the user

   The program should then use that mark and output a specific message stating what level they are at. Below is a chart with the message that corresponds with the grade ranges. For this question you could use compound if statements (AND, OR), but it is possible without if you are clever.

Mark	Output Text
From 80 to 100	Level 4
From 70 to 79	Level 3
From 60 to 69	Level 2
From 50 to 59	Level 1
From 1 to 49	Level R
0	Level I

2. Recreate the guessing game from the simple selection practice work, but this time your program will get a random number between 1 and 100 inclusive and do more than just tell them to guess higher or lower
   - It must now calculate the how far away from the user's guess the random number is and display the appropriate statement depending on the distance away
     - 0: "You win!"
     - Within 2: "Red hot"
     - Within 5: "Steaming hot"
     - Within 10: "Warm"
     - Within 20: "Cool"
     - More than 20: "Ice cold"
   - HINT: You will need to use the mathematical concept of an absolute value, this simply means, give me the positive value of any number. You can use the Math.abs(number) function to get this value.
   - This is useful when calculating the difference between two numbers and you do not know which one is larger.