

## 1. Is the number between 1-100?

Ask the user for a number and store it in an integer variable. The program should state if it is between 1 and 100. If it is not, say whether the number is too big or too small.

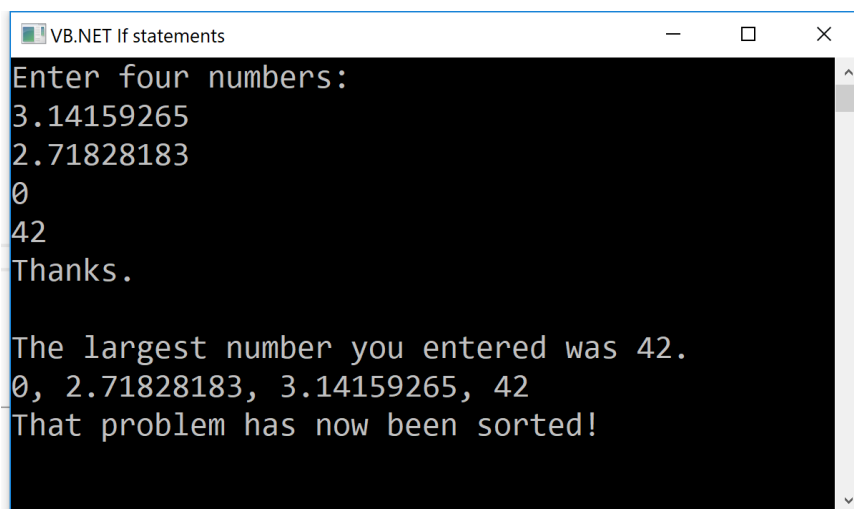
*Hint: (num >= 1 && num <= 100)*

## 2. Driving

- a) Ask the user for their age and tell them whether they can drive or not.
- b) **Extension:** Ask the user for the year they were born, the month and the day, and tell them whether they can drive or not.

## 3. Bigger Number

- a) Ask the user for two numbers. The program returns the biggest number
- b) Instead ask for three numbers.
- c) Also sort the three numbers in order, from smallest to largest
- d) **Extension:** Ask for 4 numbers instead



```
VB.NET If statements
Enter four numbers:
3.14159265
2.71828183
0
42
Thanks.

The largest number you entered was 42.
0, 2.71828183, 3.14159265, 42
That problem has now been sorted!
```

## 4. Test Mark Grader

A program is required that could be used to assign grades to test marks automatically

- A\* over 90%
- A over 80%
- B over 70%
- C over 60%

- Fail less than 60%

The program should work for any test, whatever the maximum score. It should display a certificate on the screen, for example:

“Harry Potter, Potions, 33/50, 66%, grade B”

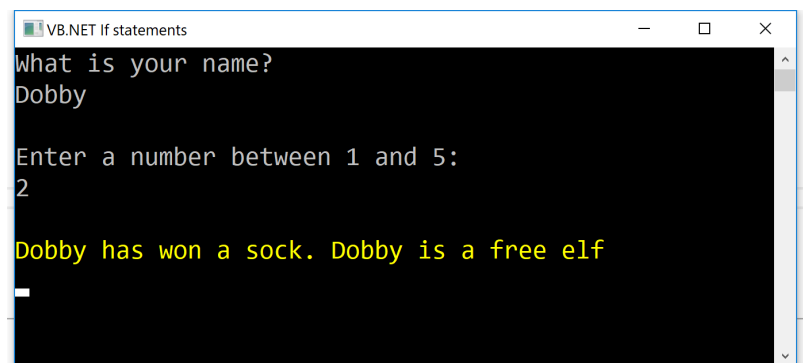
## 5. Lucky Winner

Prompt the user for a number between 1 and 5. Depending on the number output a prize:

1: You have won a TV; 2: You have won a sock; 3: You have won a cuddly toy; etc.

If they enter any other number state if the number is too big or too small.

The console should be cleared before the prize is displayed and every prize should be displayed in a different colour



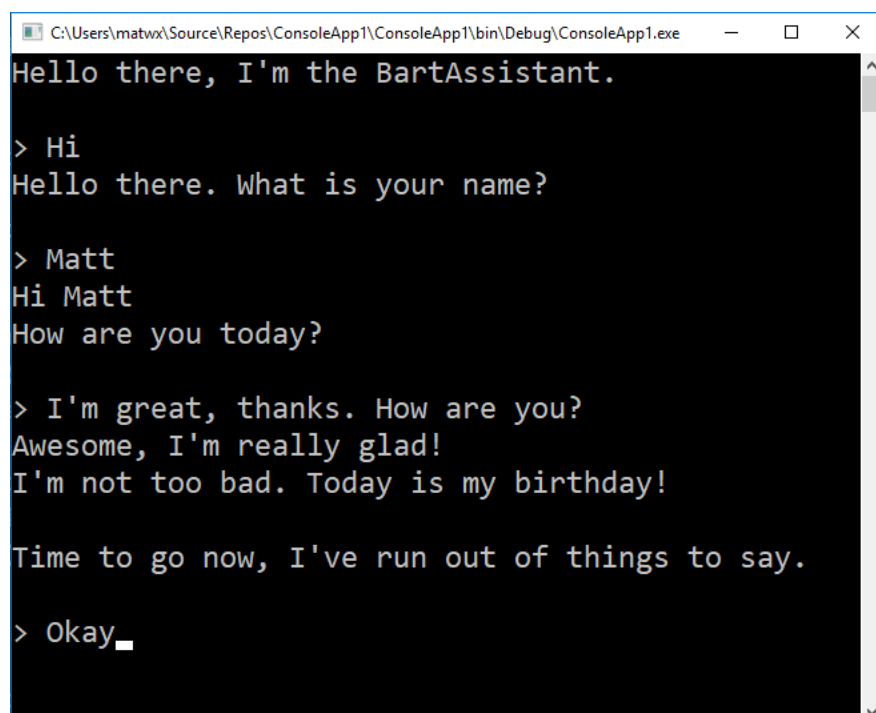
```
VB.NET If statements
What is your name?
Dobby

Enter a number between 1 and 5:
2

Dobby has won a sock. Dobby is a free elf
```

## 6. Chatbot

Create a simple chatbot for the user to talk to. An example is shown below:



```
C:\Users\matwx\Source\Repos\ConsoleApp1\ConsoleApp1\bin\Debug\ConsoleApp1.exe
Hello there, I'm the BartAssistant.

> Hi
Hello there. What is your name?

> Matt
Hi Matt
How are you today?

> I'm great, thanks. How are you?
Awesome, I'm really glad!
I'm not too bad. Today is my birthday!

Time to go now, I've run out of things to say.

> Okay_
```