

## HOW TO GENERATE A NUMBER BETWEEN 2 OTHER NUMBERS (VISUAL BASIC)

The question is : "How can I generate a number between 2 other numbers?"

The main problem with this is that many people haven't realised that the **Rnd** function returns a value **less than 1 BUT greater than or equal to zero** ( $0 \leq \text{Rnd} < 1$ ).

So since most people think that the **Rnd** function can generate the number 1, the algorithms they use are incorrect. The correct way is this :

```
Int((upperbound - lowerbound + 1) * Rnd + lowerbound)
```

Which can easily be put into a function:

```
Private Function RandomInteger(Lowerbound As Integer, Upperbound As Integer) As Integer

    RandomInteger = Int((Upperbound - Lowerbound + 1) * Rnd + Lowerbound)

End Function
```

...and an example of using it is:

```
Private Function RandomInteger(Lowerbound As Integer, Upperbound As Integer) As Integer

    RandomInteger = Int((Upperbound - Lowerbound + 1) * Rnd + Lowerbound)

End Function

Private Sub Form_Load()

    Randomize 'Just once to start getting random numbers

    MsgBox RandomInteger(1, 52)

End Sub
```

The code above would be used most of the times for a card game, to draw a card at random. If we set **Lowerbound=1** and **Upperbound=6** then we would have ourselves dice rolling code.