

## TUTORIAL – GENERATING RANDOM DATA and TABLES

If you are in a situation where you need to create tuples of information for a relation and you are not feeling that creative you can use this little tutorial. The first discusses the random name generator and the second part discusses concatenation for creating the SQL script.

*For generating random numbers you just use the RANDBETWEEN function and specify the number range.*

### Find Out How to Generate Random Names in Excel

Excel allows us to get a random number from a range using the CHOOSE and RANDBETWEEN functions. This step by step tutorial will assist all levels of Excel users to learn how to randomly generate words in Excel.

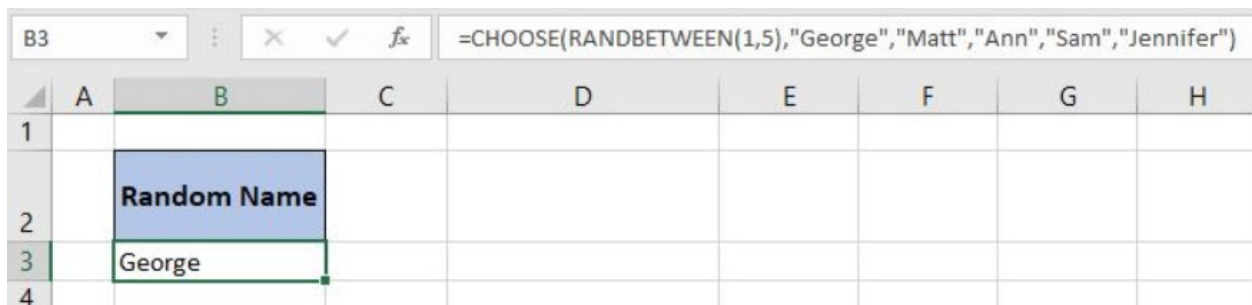


Figure 1. The final result of the formula

### Syntax of the RANDBETWEEN Formula

The generic formula for the RANDBETWEEN function is:

**=RANDBETWEEN(bottom, top)**

The parameters of the RANDBETWEEN function are:

- bottom – a value from which we want to get a random value
- top – a value to which we want to get a random value.

### Syntax of the CHOOSE Formula

The generic formula for the CHOOSE function is:

**=CHOOSE(index\_num, value1, [value2], [value3],...)**

The parameters of the CHOOSE function are:

- index\_num – an index of the value which we want to retrieve
- value1, [value2], [value3],... – a list of values from which one value is returned.

## Get a Random Name Using the Formula

In the cell B3, we want to get a random name from the name list: “Mike”, “John”, “Lilly”, “Robert” and “Jennifer”.

The formula looks like:

```
=CHOOSE(RANDBETWEEN(1,5), "George", "Matt", "Ann", "Sam", "Jennifer")
```

The parameter bottom of the RANDBETWEEN function is 1 and the top is 5. The result of this function is a random number between 1 and 5 which is the index\_num parameter of the CHOOSE function. The values of the function are “George”, “Matt”, “Ann”, “Sam”, “Jennifer”.

To apply the formula, we need to follow these steps:

- Select cell B3 and click on it
- Insert the formula: `=CHOOSE(RANDBETWEEN(1,5), "George", "Matt", "Ann", "Sam", "Jennifer")`
- Press enter.

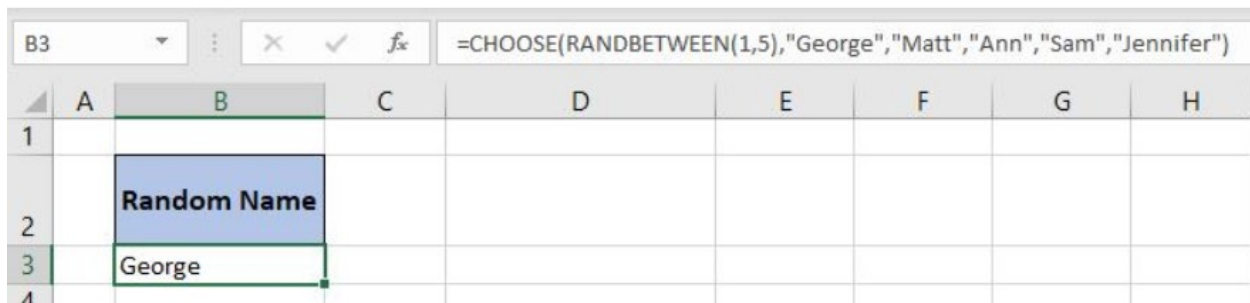


Figure 2. Using the formula to get a random name from the range

If we evaluate the function, we can see that the RANDBETWEEN function returns number 1. Therefore, the CHOOSE function returns the first value from the values. Finally, the result in the B3 cell is “George”

YOU CAN ALSO USE THIS HANDY LINK <https://www.name-generator.org.uk/>

*Once you have your list than copy, move your mouse/cursor the position of the excel template for your script and select PASTE SPECIAL and select PASTE VALUES.*

Once you have created you mock data you need to add in the constant script variables and characters. The first step is to copy the data and PASTE SPECIAL into a second worksheet using the PASTE AS VALUES (otherwise your data will always change).

To Create the Script, simply use the concatenate function, select the variable cells, and hard code ALL CONSTANTS and the ' and the , and the " and the ; and any other syntax.

Here is one line of INSERT code example

```
INSERT INTO PATRON VALUES (PATRON_ID, 'PATRON_FNAME', PATRON  
ADDRESSNUM, 'PATRON_STREET');
```

Keep in mind some rules

- Typically we don't always provide data for every single column. In some cases, the columns can be left blank and in some other provide their own default values.
- You also have situations where some columns are automatically generating keys. In such cases, you certainly don't want to try and insert your own values in those situations.
- The columns and values must match order, data type and number
- If the column is of strings or date time or characters, they need to be enclosed in the in the single quotes. If they're numeric, you don't need the quotes.
- If you do not list your target columns in the insert statement then you must insert values into all of the columns in the table, also, be sure to maintain the order of the values

Function Arguments ? X

CONCATENATE

|       |                               |   |                               |
|-------|-------------------------------|---|-------------------------------|
| Text1 | "INSERT INTO PATRON VALUES (" | = | "INSERT INTO PATRON VALUES (" |
| Text2 | ""                            | = | ""                            |
| Text3 | B6                            | = | "PATRON_FNAME"                |
| Text4 | ""                            | = | ""                            |
| Text5 | ","                           | = | ","                           |

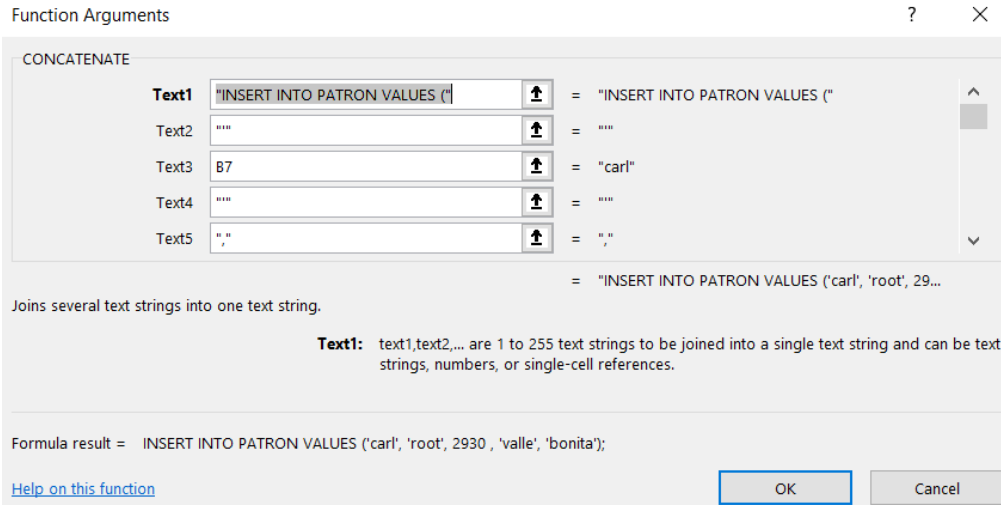
= "INSERT INTO PATRON VALUES ('PATRON\_FNA...

Joins several text strings into one text string.

**Text1:** text1,text2,... are 1 to 255 text strings to be joined into a single text string and can be text strings, numbers, or single-cell references.

Formula result = INSERT INTO PATRON VALUES ('PATRON\_FNAME', 'PATRON LNAME', PATRON\_ADDRESSNUM, 'PATRON\_STREET', 'PATR...

[Help on this function](#) OK Cancel



Move the mouse to the bottom right hand corner of the cell and drag it down for as many rows of data.

Then copy of all the data and paste as values into a notepad and then execute the script.

```

INSERT INTO PATRON VALUES ('carl', 'root', 2930 , 'valle', 'bonita');
INSERT INTO PATRON VALUES ('carl', 'root', 1590 , 'via', 'aqua');
INSERT INTO PATRON VALUES ('carl', 'jackosn', 1339 , 'camino', 'bonita');
INSERT INTO PATRON VALUES ('matt', 'smith', 2603 , 'via', 'bonita');
INSERT INTO PATRON VALUES ('carl', 'jackosn', 6940 , 'via', 'mucho');
INSERT INTO PATRON VALUES ('carl', 'root', 2559 , 'camino', 'mucho');
INSERT INTO PATRON VALUES ('carl', 'jackosn', 3923 , 'via', 'aqua');
INSERT INTO PATRON VALUES ('mary', 'root', 4359 , 'verde', 'mucho');
INSERT INTO PATRON VALUES ('mary', 'smith', 6729 , 'valle', 'grande');
INSERT INTO PATRON VALUES ('carl', 'smith', 8692 , 'via', 'mucho');
INSERT INTO PATRON VALUES ('mary', 'smith', 7709 , 'camino', 'aqua');
INSERT INTO PATRON VALUES ('matt', 'jackosn', 4368 , 'valle', 'grande');

```

```
INSERT INTO PATRON VALUES ('matt', 'root', 2951 , 'valle', 'grande');
INSERT INTO PATRON VALUES ('mary', 'smith', 6109 , 'via', 'aqua');
INSERT INTO PATRON VALUES ('matt', 'jackosn', 6269 , 'via', 'bonita');
INSERT INTO PATRON VALUES ('marco', 'jackosn', 9073 , 'camino', 'grande');
INSERT INTO PATRON VALUES ('carl', 'root', 7807 , 'verde', 'mucho');
INSERT INTO PATRON VALUES ('mary', 'smith', 2178 , 'verde', 'bonita');
INSERT INTO PATRON VALUES ('marco', 'jackosn', 379 , 'camino', 'aqua');
INSERT INTO PATRON VALUES ('carl', 'jackosn', 1137 , 'camino', 'grande');
INSERT INTO PATRON VALUES ('marco', 'jackosn', 9461 , 'valle', 'mucho');
INSERT INTO PATRON VALUES ('matt', 'root', 1351 , 'camino', 'mucho');
INSERT INTO PATRON VALUES ('matt', 'smith', 1696 , 'valle', 'bonita');
INSERT INTO PATRON VALUES ('carl', 'root', 4630 , 'via', 'mucho');
INSERT INTO PATRON VALUES ('marco', 'root', 3562 , 'verde', 'aqua');
INSERT INTO PATRON VALUES ('marco', 'root', 1798 , 'camino', 'aqua');
INSERT INTO PATRON VALUES ('matt', 'jackosn', 8023 , 'via', 'grande');
INSERT INTO PATRON VALUES ('carl', 'smith', 8745 , 'verde', 'aqua');
INSERT INTO PATRON VALUES ('mary', 'jackosn', 3004 , 'camino', 'bonita');
INSERT INTO PATRON VALUES ('carl', 'root', 7486 , 'camino', 'mucho');
```