

While loop:-

The while loop is like repeated if statement. The code is executed over and over again, as long as condition is true. Have another look at the recipe.

Example:-	<pre> x = 1 while x < 4: print(x) x = x + 1 </pre>	gives:-	<pre> execution 1 = 2 execution 2 = 3 execution 3 = 4 Now statement is false for execution 4 </pre>
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For loop:-

For loop is same as the while loop but in it we define number of iterations in condition section. It mainly ~~is~~ used to print for list and strings.

⇒ `enumerate()`:- Used for to print indexes of list in loop.

⇒ `items()`:- This is used to print keys and values of dictionaries.

⇒ ~~nditer~~ - this is used to print arrays of memory.

⇒ ~~iterrows~~ ^{iterrows}

for Pandas data frame we use `iterrows()`

apply:- If you want to calculate an entire Dataframe column by applying a function on a particular column in a element wise fashion we use `apply()`

Random numbers:-

⇒ `Seed()`:- Sets the random seeds so that your results are reproducible between simulations. As an argument, it generates a random float between zero and one.

⇒ `rand()`:- If you don't specify any arguments, it generates a random float between zero and one.

⇒ `randint()`:- also a function of the random package, to generate integers

randomly.

Random walk:-

If you use a dice to determine your next step, you can call this a random step, what if you use a dice 100 times to determine your next step? you would have succession of random steps or in other words, a random walk.