

STEP#1

Does anyone remember from the PowerPoint, a variable is like a b _ _ (box). A variable has a n _ _ _ (name). We can store some i _ _ _ (info) such as a number (eg. 3) or a message (eg. 'God is Good!') in a variable.

STEP #2

Let's give names to two variables:

- **feet**
- **inch**

In Michael Jordan's case, the info stored in the variable **feet** is the number 6 and the info stored in the variable **inch** is also equal to 6. For short, we just write **feet=6** and **inch=6** What's your value for the variables **feet** and **inch**?

STEP #3

Who remembers the word for a short computer program? c _ _ _ (code) What programming language are we learning? Py _ _ _ n. (Python)

In the next cell, we give Python code to create a function which converts height in feet and inches to height in just inches.

```
In [1]: def height(feet,inch):  
        height_in_inches = 12*feet + inch  
        return height_in_inches
```

Let's use our function to get Seimone's height in inches (recall that she's feet=6, inch=0)

```
In [2]: height(6,0)
```

```
Out[2]: 72
```

STEP #4

What do we have to do in the next cell to test our function on 6'6" Michael Jordan?

```
In [3]: height( 6, 6) # supply the missing input values for height(feet,inches)
```

```
Out[3]: 78
```

STEP #5 (In Groups)

One of the fun parts of programming is that we can try to design a function to do almost anything we want.

Mimic the example in Step 3 to define a function called `points(fg,ft,tp)` which computes the points scored by a basketball player given the input variables

- `fg`= number of 2 point field goals made
- `ft`=number of free throws made
- `tp`=number of three point shots made

Use a variable called `pts` to store the answer. (If you get stuck, ask for help)

```
In [4]: def points(fg,ft,tp):  
        pts = 2*fg+ft+3*tp  
        return pts
```

STEP #6 (In Groups)

In his heighest scoring game, Michael Jordan made 21 two-point field goals, 21 free throws and 2 three point shots. Check that your function in STEP 5 gives the correct value of 69 for his point total.

```
In [5]: points( 21,21 ,2)    #Supply the missing values for points(fg,ft,tp)
```

```
Out[5]: 69
```