Introducing Functions

Raihanul Bashir Hridoy

In[1]:=
```
Plus[3, 4]
```
Out[1]= 7

In[2]:=
```
Plus[1, 2, 3]
```
Out[2]= 6

In[3]:=
```
Times[2, 6]
```
Out[3]= 12

In[4]:=
```
Times[2, Plus[2, 3]]
```
Out[4]= 10

*** All functions in the Wolfram Language use square brackets, and have names that start with capital letters.

In[5]:=
```
Max[2, 7, 3]
```
Out[5]= 7

The function RandomInteger picks a random integer (whole number) between 0 and whatever size you say.

In[6]:=
```
RandomInteger[100]
```
Out[6]= 78

In[7]:=
```
RandomInteger[100]
```
Out[7]= 46

Exercises:

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1. Compute 7+6+5 using the function Plus.

```
In[8]:= Plus[7, 6, 5]
Out[8]= 18
```

2. Compute 2×(3+4) using Times and Plus.

```
In[9]:= Times[2, Plus[3, 4]]
Out[9]= 14
```

3. Use Max to find the larger of 6×8 and 5×9.

```
In[10]:= Max[Times[6, 8], Times[5, 9]]
Out[10]= 48
```

4. Use RandomInteger to generate a random number between 0 and 1000.

```
In[11]:= RandomInteger[1000]
Out[11]= 750
```

5. Use Plus and RandomInteger to generate a number between 10 and 20.

```
In[12]:= RandomInteger[Plus[10, 20]]
Out[12]= 14
```

6. Compute 5×4×3×2 using Times.

```
In[13]:= Times[5, 4, 3, 2]
Out[13]= 120
```

7. Compute 2–3 using Subtract.

```
In[14]:= Subtract[2, 3]
Out[14]= -1
```

8. Compute (8+7)*(9+2) using Times and Plus

```
In[15]:= Times[Plus[8, 7], Plus[9, 2]]
Out[15]= 165
```

9. Compute (26–89)/9 using Subtract and Divide

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```
In[16]:= Divide[Subtract[26, 89], 9]
Out[16]= -7
```

10. Compute 100–5^2 using Subtract and Power

```
In[17]:= Subtract[100, Power[5, 2]]
Out[17]= 75
```

11. Find the larger of 3^5 and 5^3

```
In[18]:= Max[Power[3, 5], Power[5, 3]]
Out[18]= 243
```

12. Multiply 3 and the larger of 4^3 and 3^4

```
In[19]:= Times[3, Max[Power[4, 3], Power[3, 4]]]
Out[19]= 243
```

13. Add two random numbers each between 0 and 1000

```
In[20]:= Plus[RandomInteger[1000], RandomInteger[1000]]
Out[20]= 959
```