Like constants, variables are considered a data type that stores information that the program uses. Unlike constants however, variables are used when there is a need to change or update a value. Some examples include:

int a = 1;

if (a >= 1)

{

Run code

}

Here the program checks for the variable ‘a’ and asks if it is greater than or equal to one. If the statement is true, then it runs the code beneath.

int a = 1;

int b = 0;

if (a >= 1 && b <= 0)

{

b++;

}

else if

{

print(b)

}

Here we declare two variables, a and b and assign them a value. Since the statement is true the program will add one to b and pass it back to the variable. When the program runs again the statement will now be false and will print out the value of b (one).

int a;

int b;

int c;

a = 2;

b = 3;

c = a + b;

Here we initialize three variables, a, b, and c, which are set to zero by default. We then assign numbers to both a and b and then we add them together to get c’s new value.

string message = “Hello”

print (message);

Another type of variable is a string which letters or text. Here we create a string called message and assign it the text Hello. We then call the string by its name (message) within print.

double area (double h, double w)

{

return h \* w;

}

Here we create a double, which is used to hold decimals. We name the double area and within area we utilize two more doubles for height and width (h & w). We take those two values, multiply them together, then return the value as the area.