Using characters

```
#include <stdio.h>
int main(void) {
   char letter;          //DECLARE A CHARACTER VARIABLE
   letter = 'a';         //DEFINE or INITIALIZE or ASSIGN a character value
   printf("The letter is %c",letter);
   return 0;
}
```

Reading characters from the user input

Characters behave differently from numbers in the scanf function. Scanf, when dealing with numbers, automatically skipped white space. And I could put in as many spaces between numbers as I wanted to. That is not true for characters. A space would be considered just another character.

```
#include <stdio.h>
int main(void) {
   char letter, letter2;

   printf("Please enter two letters separated by a space: ");
   scanf("%c,%c", &letter, &letter2);
   printf("I read the letters %c and %c.\n", letter, letter2);
   return 0;
}
```

Using decimals

Declare, assign and print decimal numbers

Decimal number is another type of variable, and we have six decimal places in C.

```
#include <stdio.h>
int main(void) {
   double height;
   height = 1.99;
   printf("Please enter two letters separated by a space: ");
   printf("I am %.1lf meters tall.",height);
   return 0;
}
```

Read decimal numbers from user input with scanf()

```
scanf("%lf", &height);
```

Read integers and doubles with scanf()

Dividing in C

Divide in C

```
#include <stdio.h>
int main(void) {
   // integer division
   printf("5/2 equals %d\n", 5/2);
   // floating point division : when one of the numbers is floating point, the result will be a floating
point
   printf("5.0/2.0 equals %lf\n", 5.0/2.0);
   printf("5/2.0 equals %lf\n", 5/2.0);
   printf("5.0/2 equals %lf\n", 5.0/2);
   return 0;
}
```

Divide with integer and double variables

Finding the remainder

Find the remainder in integer division

```
int rest = 166%20;
```

Converting integers to decimals

Convert integers to double

```
dOne = (double) iOne;
```

Convert double to integers

```
iOne = (int) dOne;
```