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Implicit vs explicit casting

Type casting is changing the data type of a variable after it has been declared by the program previously, to use in an operation, or to perform an action on the variable that requires to access a parameter not indicated by the data type.

This is done in 2 ways, explicitly and implicitly.

Explicit casting is done by the coder, which is basically declaring the new data type that needs to be used at that specific line. E.g.:

Char c; //prompt user to input the character

Int asci=0; //initiated as 0

Asci = (int) c;

Printf(“%d”,asci);

This examples converts the character entered by the user to its ascii value by declaring it to be an int.

Implicit casting is done automatically by the compiler when a value needs to be converted (upgraded) to a different type in order to match the desired outcome.

e.g.:

char c;

int x,sum;

sum = x + c;

printf(“%d”,sum);

in this example, the compiler sees that the desired output is an int (%d In the print statement) so it converts the char c variable into its int value (ascii value) in order to sum it in the previous line.