# Scratch to C# : https://lh4.googleusercontent.com/UQiGzyS-M-BA812Rs8TOE98rOghb4pKoJ_WdZPUhICNT8MYy9Cpr8uxygXtUjulrZeC53z5BvBuD-VrgJoS6R56fLq7IQPjDV6MfDYfQ1GuvDGw78eMwwD3GkDhWccIj

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| https://lh6.googleusercontent.com/WCSp4SePanoZHYQ7UtFkiZi46EXaWJzZcxky0ff_Y-lfU0kGNUg7pV8e_LeNvTllk-R3Vnc_KnPZhTsEZc00Bloi42HgtweGC1GCoPOkOh16CPl9w_3hk2WERmfKd03c | bool MyVariable = true;  int MyVariable = 3;  float MyVariable = 3.334  string MyVariable = “Some Value”;  MyClass MyVariable = new MyClass(); | In C# variables have different types.  The most common C# types are:   |  |  | | --- | --- | | bool | Holds only values true or false | | int | Numbers without a decimal point | | float | Numbers with a decimal point | | string | Words or letters |   Games also commonly use these   |  |  | | --- | --- | | Vector2 | Stores an X and Y position | | Vector3 | Stores an X, Y, and Z position |   You can also create your own classes for more complicated values, and store these in a variable. |
| https://lh5.googleusercontent.com/AGHsZOdYXYWbtJxozVOQ2_WHGsFA3Qv7qah9iwQV6-BPT2_8djq2eYe4kjbDqnckvacsTZ-flfvTi-LcNfGzwEOk3yDsSknA3kbbB0_W_xAvOq-Zl3iRfxUv4_0nyZHT |  | Does not apply. Just delete it from the code. |
| https://lh5.googleusercontent.com/auJgcEso8vLRI6pLUHc0d1CzKnHobwDhPBMiH7XT8f-RMBCHBzPo0d0n9yypFnK6G97t9Fsmh9MUxdZH9QVFs7_OiFKqJ2aR2MjviZvB3lxZBwU3ACGe1Nuxxmsz5ilz | MyVariable | Retrieve the value from a variable |
| https://lh5.googleusercontent.com/FprEaz2L71BS-C7LnrZHLxZa7u8L-_491PlH4tss1su6hBr9tBKfZQVpS_GV-Ivea2ZhyXp2b-rDvWGct7HHo4I-TgjA-YuGh_fdE3s2e8F5Rj_dJ5HxZfKHdmyKmwhT | MyVariable = 0; | Set a value into a variable |
| https://lh6.googleusercontent.com/ETgHlwV94m30NZjFtX14LHBiMST4RpCk47Y1Gr_dHClvvIEX2-6cLtEHPBfDupfmlTfz5Rbuzo3mpweSPEDs7m_oFe58626L329aAuyhTs-Z7H5ysqSs_Wm4onx-GZDV | MyVariable += 1; | Change a variable by some amount. |
| https://lh4.googleusercontent.com/AzR8ZPeJJ70ckrZIElEyOKSmN9hLJJnjXYPWDEP-ny085kc_acCkDOQZjaxkzk2uDAdMvPDSYEBVtJdFdFqTkOnh-ZSwYcJFYLw05cUof96kFiPaIjrCWhvd9lWVtJz- |  | You can make a class property “public”, which means other classes can see it. But this dos not show it on the screen. |
| https://lh5.googleusercontent.com/s_Fq9pqzgjWcDBZ8hXpuNRPAV_s_i82wxytKhiAQQq5zMKHWq3UQjKyWEIBERw9WBS_pzPrGp0TwSdy3SrJ64UJtwdwHaE2VNeFL9xc1jrjdINsL553dDhmTXEeuZHZ0 |  | Same as above, but “private” |
| https://lh5.googleusercontent.com/CJr_Rz63BVKN5GZGvqZidQy2wC3Tu5aQyg-pEwINXEHsZ_0yOnel8e_25juB0DY5nIKDEqprMeDhtslsL-eB6jDG-PEgrhwbTexD58uPg9rk5xHugtBNBLYn3YaCSsm3 | var MyList = new List<string>();  var MyList = new List<int>();  var MyList = new List<Alien>(); | Create a list of things. Inside the <> you put the variable type to use.  This can even be custom classes that you create. |
| https://lh3.googleusercontent.com/H0WgMAh2tOiogsClKQrfNKgX4qoVJYxDzDmHCUG3CIdeHY0yFKLfJ3XXf5USW2K_DF3uam7bpeSqyG8HfHHg2pA3bak3FTqzpHUBQbQFwtE2hDK9TzHO59SciaDczVVV |  | Does not apply. Just delete it from the code. |
| https://lh3.googleusercontent.com/A3rjgc1IGdd2rwi7J4ZmnOURDfyxZXz7BL18O73hI6iwkyf0CbgYl23FaxNrhn4IxIWSEvXZf3LXY2XWsRdkxpR8Z4v3ud-aYWWSfnh_Xwvqyk-W5KOhy1MP7KBADtBN | MyList | Use a list variable |
| https://lh6.googleusercontent.com/aBHyF7eANUeSyQwygIlSWX9a7e7zDNPkMSFbskimtGytV_1_aXzJ25JXIrTqvfWvNsMLGsjJgkAPxpopUP8c62Hvb-QrMgf-9pagP1BG_km_qqQrfQADnmfeTkpFy0gg | MyList.Add(thing; | Add something to a list |
| https://lh6.googleusercontent.com/b9PrLmD9mQRdUN5wNExN0FyI_s57kkbf-y4CPMHAwYHlUcSKB_LzaV5zPk-zepToTPtVB3qHQBkXteJdLoL1yI0aCZ64U4wjhJa7a2gyxXRs5M6G1WfrCU8a1sVby8HY | MyList.Delete(thing); | Delete something from a list |
| https://lh6.googleusercontent.com/JxvW4RCqnrNQd_ZIo0gq5I-aMgRXtVl5I2D8k3qcc-76PP4pLJ2dJtwvrZC2hqSv8wBjNYNlRf7MOsRv1ccU5KuA-SsCaTd91v6IC2BT9qfvRpqnvEpHrQmwbmsl3wC3 | MyList.Insert(0, thing); | Insert something into a list.  The first index of a list is 0, not 1. |
| https://lh6.googleusercontent.com/QcrVr4C5eSp2EHBShBDG0jZnu9-HfCoZwfblwZ8N-3gyY-xF8jwH9qCATj2b8ysYUizRT7A-fa1JgzjVdSSK_z4x-B2lnyNA6l8qGeZ99-23GWADe7V1NbYR4_CmKHS- | MyList[0] = thing; | Replace an item in a list. The first index of a list is 0, not 1. |
| https://lh4.googleusercontent.com/0kKaKpWLAqWxD1mIpLMZ-35s8SlDut2H34Km6oAhpSQWcHPD1Sp1315b_o_j17PzVOktpgRljpbeL1Wu-5qyOe13dJsGAe7lYEO6bZ8KP6bUkkvcmj3I57jEN2kmsryc | MyList[0] | Get an item from a list. The first index of a list is 0, not 1. |
| https://lh5.googleusercontent.com/mVc7uPsyyIX5H1Y9nwtLtK-qCbMvgsjiSN5EBSmBP6zr5kRy9XCvtqMs80zWqEXzza26NA6k1b1Lv1uojQ8sx_9AKy9UlMIbqYRJyxyvUCzchyx2GVSsDQfokKUQt-5V | MyList.Count | Number of items in a list. |
| https://lh4.googleusercontent.com/MTQ8FzWQm8xpCfWMHCDXAHFqZZHzZbBsrbXxXuFdPknfSzYh2xatIOPmwDX5XINRbYgt0fgiGdDEDF9W9qVx6PRCYd3s3y7Ma5-AEpbTNUrEaHbvYSR8iKvLGBUOuga7 | MyList.Contains(thing) | True if the thing is in the list |