Multiple Choice Questions (with solutions)

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1. Why are the instructors sharing most of the material in odt, docx, pdf, html and md?
   * To insure compatibility across operating systems (Android, Linux, Windows, MacOs, …).
   * To make it easier to access the resources in multiple ways (print, screen, etc.)
   * All of the above.

* What does “free” software means?
  + That the software has no value.
  + That the users can run the software for any purpose and study its source code.
  + That it is not developed by a company.
  + That the software can be downloaded at no cost.
* In your IDE, the shortcut to compile your program is usually…
  + “Build your solution”, ctrl + shift + B or Cmd + B
  + “Save”, ctrl + S or Cmd + S
  + “Exit”, alt + F4 or Cmd + q
  + “Start without debugging”, Ctrl + F5 or Cmd + F5
* To share or backup a project, you need to…
  + share the .sln file.
  + share the .cs file.
  + share the .csproj file.
  + zip the folder containing the .sln file and another folder with multiple files and folders in it.
* If your IDE returns the message
* Program.cs(21,21): Error CS0117: 'Console' does not contain a definition for 'WiteLine' (CS0117) (Solution)
* This means that…
  + That you misspelled the word “WriteLine”.
  + Your program successfully compiled and is ready to be executed.
  + That the “Console” class does not exist.
  + Your IDE was not properly installed and you should reboot your computer.
* Consider the following code:
* int age, defaultChoice = 0;  
  decimal averagePrice;
* Which of the following is correct?
  + It contains declaration and initialization statements.
  + It declares variables of two different datatypes.
  + Only the value of defaultChoice is set.
  + All of the above.
* Consider the following code:
* int person = 12;  
  int pie = 5;  
  int piePerPerson = pie / person;  
  Console.WriteLine("Each guest gets " + piePerPerson + " pie(s).");
* What will be displayed by it?
  + Nothing: an error will prevent from compiling it successfully.
  + “Each guest gets 2.4 pie(s).”
  + “Each guest gets 0.41666666666666666666666…” (it will never ends, displaying 6 forever).
  + “Each guest gets 0.416666666666667 pie(s).”
  + “Each guest gets 0 pie(s).”
* Consider the following statement:
* decimal balance = 2.5M;  
  decimal price = 12;  
  decimal remainingBalance = balance - price;
* Which of the following is correct?
  + This program will not compile because the result of balance - price is not a decimal.
  + This program will not compile because a decimal cannot be negative.
  + This program will compile.
  + This program will not compile because you cannot store an integer value (12) in a decimal.
* The method used to read a string from the user is called…
  + ReadString
  + ReadFrom
  + ReadLine
  + ReadInput
* Consider the following program:
* Console.WriteLine("Enter your age.");  
  string fromUser = Console.ReadLine();  
  int age = \_\_\_\_\_\_\_ (fromUser);
* To correctly be able to store the string in fromUser into age, you should replace \_\_\_\_\_\_\_ with…
  + (int)
  + int.Parse
  + Nothing: as long as the user enters an integer value, we can store it into age just fine.
  + None of the above.
* What are, respectively, the return types of a constructor and of a ToString method?
  + Constructors do not have a return type, and a ToString method returns a string.
  + Constructors and ToString methods both return strings.
  + Constructors returns a string, and a ToString method does not return anything (it simply displays a text).
  + It is impossible to know ahead of time, as this depends of the class they are implemented in.
* What is the name of a constructor method?
  + Nothing: an error will prevent from compiling it successfully.
  + Whatever the name of the class is.
  + It does not have any.
  + The name of the instance it creates.
  + Constructor
* What are the three logical connectives in C# (that we studied)?
  + And (&&), or (||) and negation (!).
  + Equality (==), greater than (>) and less than (<).
  + And (and), or (or) and negation (not).
* Which of the following will evaluate to true?
  + 3 > 1 && 2
  + (3 > 1) && 1 != 0
  + !(3 > 1)
  + 3 > 1 || 2
* Will the following expression evaluates, and if so, what will it evaluate to?
* true == false || 2 / 1 > 0 && 3 - 1 != 2 \* 0.5 + 0.5
* evaluates?
  + It will evaluate to a number.
  + It will evaluate to false.
  + It will evaluate to true.
  + It will not evaluate.
  + None of the above.
* What will be displayed by the following code?
* int number = 10;  
  while (number <= 15)  
  {  
   number+=2;  
   Console.Write(number + " ");  
  }
  + 12 14 16
  + 10 11 12 13 14 15
  + 10 11 12 13 14
  + 10 12 16
  + 10 12
  + 10 12 14
  + 12+14+16
  + 10+11+12+13+14+15
* What will be displayed by the following code?
* int i = 0;  
  while(i < 10)  
  {  
   Console.WriteLine(i);  
  }
  + 0 followed by a new line, forever.
  + 0 1 2 3 4 5 6 7 8 9
  + 0 1 2 3 4 5 6 7 8 9 with a new line between each number
  + Nothing
* Consider the following code:
* Console.WriteLine("Enter… something!");  
  int answer;  
  bool valid = int.TryParse(Console.ReadLine(), out answer);  
  Console.WriteLine($"returns: {valid}, value:{answer}");
* If the user enters “Train”, then it will display:
  + returns: False, value: 0
  + returns: True, value: 0
  + returns: True, value: Train
  + returns: False, value: Train
  + Nothing: the program will crash.
* Consider the following code:
* string answer;  
  Console.WriteLine("Enter something");  
  answer = Console.ReadLine();  
  while (answer != "yes" || answer !="Yes"){  
   Console.WriteLine("Enter something");  
   answer = Console.ReadLine();  
  }
* What can the user enters to *exit* this loop:
  + There is nothing the user can enter to exit this loop
  + Either “Yes” or “yes”
  + Anything that is different from “Yes” and “yes”
  + Anything
* Consider the following code:
* int answer;  
  Console.WriteLine("Enter something");  
  answer = int.Parse(Console.ReadLine());  
  while (answer > 10 && answer < 100){  
   Console.WriteLine("Enter something");  
   answer = int.Parse(Console.ReadLine());  
  }
* What can the user enters to *exit* this loop?
  + Any number not between 10 and 100 (both included)
  + Any number between 10 and 100 (both included)
  + Any number between 10 and 100 (both excluded)
  + Any number not between 10 and 100 (both excluded)
* What will be displayed by the following code?
* for (int e = -5; e <= 20; e += 5)  
  {  
   Console.Write(e + " ");  
  }
  + -5 0 5 10 15 20
  + -5 0 5 10 15
  + 0 5 10 15
  + -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
  + Nothing
  + 0 5 10 15 20
* What will be displayed by the following code?
* int variable = 0;  
  for (int e = 1; e <= 5; e += 1)  
  {  
   variable += e;  
  }   
  Console.WriteLine(variable);
  + 15
  + 0
  + Nothing
  + 1 2 3 4 5