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| **C# Programming Random Numbers**  It is often useful to have the computer generate a random number. Most programming languages give functions to create random numbers. In C# we need to declare a new variable as a Random Class. We then use a method associated with this called Next.  **Statements Used**  RND()  RANDOMIZE  INT  **Program 1 – Generates a random number of any size**  static void Main(string[] args)  {  Random r = new Random();  int ran = r.Next();    Console.WriteLine("The Random number is: " + ran);    Console.ReadLine();  }  **Program 2 – Generates a random number between 0 and 99**  static void Main(string[] args)  {  Random r = new Random();  int ran = r.Next(100);    Console.WriteLine("The Random number is: " + ran);    Console.ReadLine();  }  **Program 3 – Generates a random number between 10 and 19**  static void Main(string[] args)  {  Random r = new Random();  int ran = r.Next(10, 20);    Console.WriteLine("The Random number is: " + ran);    Console.ReadLine();  } |
| **Programming Tasks**  For each of these programming tasks, create and test a program. For each:   * Add comments with a description of the task, your name and the date * Copy the program to a Word document * Paste a screen shot of the console as evidence that the program worked * Check that you have your name, set and date in a header   For each, test the program with a range of test values and comment on your results.  **Task 1**  Write a program that generates and displays 2 random numbers. Use the FORMAT function to show these numbers to 2 decimal places  **Task 2**  Write a program that generates a random number between 0 and 100.  **Task 3**  Write a program that generates 2 random numbers, the first should be a real number displayed to 3 d.p. and the second should be an integer between 0 and 25  **Task 4**  Write a program that generates a random number between 50 and 100.  HINT: a random number between 0 and 50, then add 50.  **Task 5**  Write a program that generates a random number between 100 and 200. |