EZYPAY IT Development Test Questions – Snr Developer

1. What is the root class in .NET

2. What is Reflection (from a .NET perspective)? Give an example why you might use it.

3. What is Referential Integrity?

4. What are cursors (in regard to Transact-Sql)? What are the disadvantages? How can you avoid Cursors?

5. Query question:

   Data Table

ID	Date	Units
1	01/10/2005	10
2	02/10/2005	5
3	03/10/2005	8
4	04/10/2005	7

   What do you think would be the best way to produce the following results? That is, what approach would you take in constructing a query to return these results?

   If you can, please write a query that would produce the result otherwise write down (in point form) what idea's run through your head or what may be required to produce the results.

   The Diff column is the difference between the Units for the EndDate displayed and the Units for the Date preceding it.

EndDate	Diff
02/10/2005	5
03/10/2005	-3
04/10/2005	1

Answers:

1. The class **System.Object** is the root class in .NET. All classes inherit from System.Object.

2. **Reflection** allows the programmers to access attributes in the assembly during runtime. Attributes are extra information that can be applied to chunks of code within an assembly.
   For example,
   in order to find out the details and version information of an application (which is stored in the file AssemblyInfo.cs), Reflection could be used to find the following attributes:
   AssemblyTitle
   AssemblyDescription
   AssemblyCompany
   AssemblyVersion

3. **Referential integrity** is a database concept that ensures that relationships between tables remain consistent. When one table has a foreign key to another table, the concept states that you may not add a record to the table that contains the foreign key unless there is a corresponding record in the linked table.

4. **Cursors** allow row-by-row processing of the result sets.
   Disadvantages of cursors: costly because they require more resources and temporary storage.
   To avoid cursors use set based operations instead.