

Worksheet 5 – Hash Algorithms

Hash Algorithms @.NET

Covered topics:

- Concept of Hash Algorithms
- Hash Algorithms in .Net

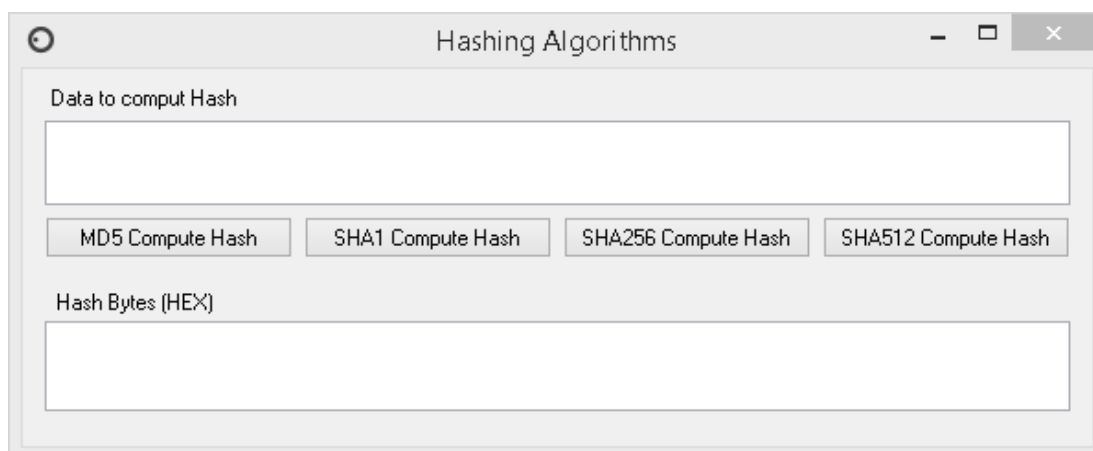
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1. Hash Algorithms

The next exercise shows how to use Hash Algorithms in .NET.

Exercises

1. Download the project “ei.si-worksheet5-ex1.1” and use the existing *Form* components to:

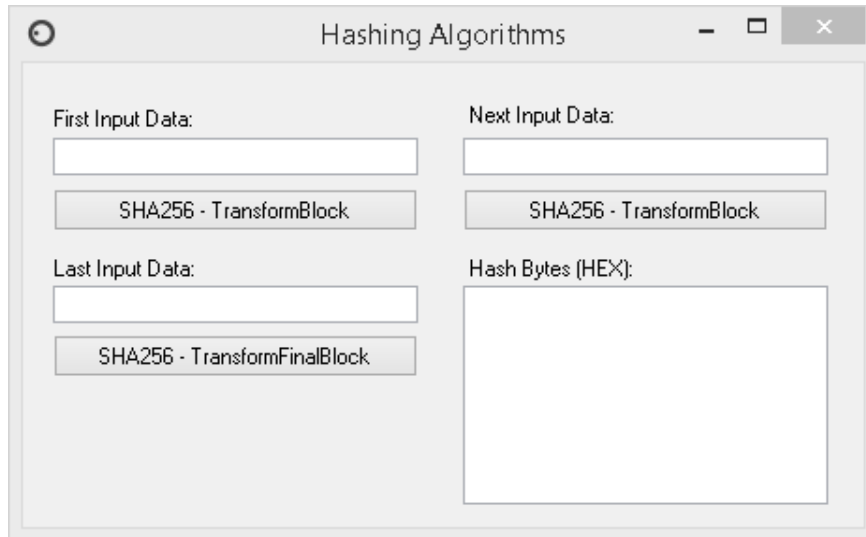


- 1) Calculate the *hash value* using the MD5 algorithm.
- 2) Calculate the *hash value* using the SHA1 algorithm.
- 3) Calculate the *hash value* using the SHA256 algorithm.
- 4) Calculate the *hash value* using the SHA512 algorithm.

2. Extra Class

Exercises

1. Download the project “ei.si-worksheet5-ex2.1” and use the existing form components, to achieve the following objectives:



- Calculate the *hash value* using the SHA256 algorithm.
- Using the Hash property.
- You must execute the sequence present on the form [1), 2), 3)].
- Use the methods: **TransformBlock()** and **TransformFinalBlock()**.
- Only display the result in the textbox after the final block has been processed.