Question:

Find out the input string that was passed to the following hash function

Integer Hash (String inputString)

{

       Integer outputNumber = 7;

       String letters = "acdegilmnoprstuw";

       Integer index = 0;

       Integer lengthOfInputString = inputString.Length;

       while (index < lengthOfInputString)

       {

              outputNumber = (outputNumber * 37 + letters.IndexOf (inputString [index]));

              index = index + 1;

       }

       return outputNumber;

}

That produced the hashed output (integer value) as

945901726134069

Provided, the input string length was 9 and contains only characters from the below string

"acdegilmnoprstuw"

Note: You need to reverse engineer the above hash logic and find out the answer.

HELP:

String – a data type that holds collection of characters, an array of characters with zero-based index. **Hash** – Modify an input value to a different one using which one cannot easily find out the original value. **Dehash** – Find the original input value that was modified by hashing. **Function** – a code snippet that accepts zero or more number of input parameters and return either no value or a value. **Integer** – a data type that holds both positive and negative full numbers. **<string_variable>.IndexOf** – an in-built function in any programming language that finds out the starting index of any substring (one or more characters together) inside the value stored in string_variable. **<string_variable>[<integer_variable>]** – an expression that returns the character at the index specified by the value of integer_variable