TASK 3 – MINIPROJECT

PROPERTY ANALYZER OF ANY GIVEN NUMBER

INTRODUCTION

This is an application which checks for various properties of a number. When a number is given, the application checks whether the number is Prime, Armstrong, Odd/Even, Palindrome, Power, Harshad, Perfect_square, Perfect_cube, Automorphic, Divisible by 3, Divisible by 5 and Divisible by 7.

REQUIREMENTS

HIGH LEVEL REQUIREMENTS

ID	DESCRIPTION
HL_01	Check for different properties of the number
HL_02	Determine the divisibility
HL_03	Perform different operations

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LOW LEVEL REQUIREMENTS

ID	DESCRIPTION
HL_01_LL_01	Determine whether the given number is prime
HL_01_LL_02	Determine whether the given number is Armstrong
HL_01_LL_03	Determine whether the given number is Odd or Even
HL_01_LL_04	Determine whether the given number is a Palindrome
HL_01_LL_05	Determine whether the given number is a power of 2
HL_01_LL_06	Determine whether the given number is a Harshad number
HL_01_LL_ 07	Determine whether the given number is a perfect square
HL_01_LL_08	Determine whether the given number is a perfect cube
HL_01_LL_09	Determine whether the given number is an Automorphic number
HL_02_LL_01	Determine whether the given number is divisible by 3
HL_02_LL_02	Determine whether the given number is divisible by 5
HL_02_LL_03	Determine whether the given number is divisible by 7
HL_03_LL_01	Perform addition operation
HL_03_LL_02	Perform subtraction operation
HL_03_LL_03	Perform multiplication operation
HL_03_LL_04	Perform division operation