

# Conversion Tasks Based on Album Number 72576

## Task 1

Last two digits of my album number as a decimal fraction and converted then to binary.

Last two digits: 76

In binary:

$$76_{10} = 1001100_2$$

## Task 2

Last three digits of my album number in binary format and converted then to hexadecimal.

Last three digits: 576

In binary:

$$576_{10} = 1001000000_2$$

In hexadecimal:

$$576_{10} = 240_{16}$$

## Task 3

Second and third digits of my album number as a decimal fraction and converted then to hexadecimal.

Second and third digits: 25

In hexadecimal:

$$25_{10} = 19_{16}$$

## Task 4

First and last digits of my album number in hexadecimal format and converted then to binary.

First and last digits: 72

In hexadecimal:

$$72_{10} = 48_{16}$$

In binary:

$$48_{16} = 01001000_2$$

## Task 5

Third and fourth digits of my album number in hexadecimal format and then converted to decimal, passing through the binary system.

Third and fourth digits: 57

In hexadecimal:

$$57_{10} = 39_{16}$$

In binary:

$$39_{10} = 100111_2$$

Then back to decimal:

$$100111_2 = 39_{10}$$

## Task 6

Using Horner's method, the result as a decimal number for the following cases:

If the third digit of my album number equals:

1. 5: Convert  $413214_5$

Result:  $13559_{10}$ .