**DecimalToHexal**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Line | dec | result | factor | digit | Comment |
| 1 | 22 |  |  |  |  |
| 3 |  | 0 |  |  |  |
| 4 |  |  | 1 |  |  |
| 5 |  |  |  |  | 22 != 0 |
| 7 |  |  |  | 4 | dec % 6 |
| 8 | 3 |  |  |  | dec / 6 |
| 9 |  | 4 |  |  |  |
| 10 |  |  | 10 |  |  |
| 5 |  |  |  |  | 3 != 0 |
| 7 |  |  |  | 3 | dec % 6 |
| 8 | 0 |  |  |  | dec / 6 |
| 9 |  | 34 |  |  |  |
| 10 |  |  | 100 |  |  |
| 5 |  |  |  |  | 0 == 0 |

|  |  |
| --- | --- |
| Input | Output |
| 17 | 25 |
| 42 | 110 |
| 69 | 153 |
| 666 | 3030 |

**OtherToDecimal**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Line | other | system | result | factor | digit | Comment |
| 47 | 35 | 6 |  |  |  |  |
| 49 |  |  | 0 |  |  |  |
| 50 |  |  |  | 1 |  |  |
| 51 |  |  |  |  |  | 35 != 0 |
| 53 |  |  |  |  | 5 | other % 10 |
| 54 | 3 |  |  |  |  | other / 10 |
| 55 |  |  | 5 |  |  |  |
| 56 |  |  |  | 6 |  | factor\*system |
| 51 |  |  |  |  |  | 3 != 0 |
| 53 |  |  |  |  | 3 | other % 10 |
| 54 | 0 |  |  |  |  | other / 10 |
| 55 |  |  | 23 |  |  |  |
| 56 |  |  |  | 36 |  | factor\*system |

**DecimalToOther**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Line | dec | system | result | factor | digit | Comment |
| 33 | 23 | 6 |  |  |  |  |
| 35 |  |  | 0 |  |  |  |
| 36 |  |  |  | 1 |  |  |
| 37 |  |  |  |  |  | 23 != 0 |
| 39 |  |  |  |  | 5 | dec % system |
| 40 | 3 |  |  |  |  | dec / system |
| 41 |  |  | 5 |  |  |  |
| 42 |  |  |  | 10 |  | factor \* 10 |
| 37 |  |  |  |  |  | 3 != 0 |
| 39 |  |  |  |  | 3 | dec % system |
| 40 | 0 |  |  |  |  | dec / system |
| 41 |  |  | 35 |  |  |  |
| 42 |  |  |  | 100 |  | factor \* 10 |

**ConvertNumberFromSystemToSystem**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Line | number | fromSystem | toSystem | result | Comment |
| 30 | 35 | 6 | 10 |  |  |
| 32 |  |  |  | 0 |  |
| 33 |  |  |  | 23 | OtherToDecimal(35,6) |
| 34 |  |  |  | 23 | DecimalToOther(23,10) |
| 35 |  |  |  | 23 | return |

|  |  |
| --- | --- |
| Input | Output |
| 1, 2, 3 | 1 |
| 101, 2, 3 | 12 |
| 17, 10, 16 | 11 |
| 141, 10, 2 | 10001101 |