Example 1 (uint8)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  | **Decimal** |
| X | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |  | 7 |
| Y = X << 2 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |  | 28 |

Example 2 (uint8)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  | **Decimal** |
| X | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |  | 13 |
| Y = X << 4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |  | 208 |

Example 3 (int8)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  | **Decimal** |
| X | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |  | 13 |
| Y = X << 4 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |  | -48 |

Example 4 (int16)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Decimal** |
| X | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |  | 13 |
| Y = X << 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |  | 208 |

Example 5 (int16)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Decimal** |
| X | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |  | 13 |
| Y = X << 11 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 26624 |

Example 6 (int16)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Decimal** |
| X | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |  | 13 |
| Y = X << 12 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | -12288 |

Example 7 (int16)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Decimal** |
| X | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |  | 13 |
| Y = X << 8 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 3328 |
| Z = X + Y | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |  | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |  | 3341 |

Example 8 (uint8)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  | **Decimal** |
| X | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |  | 28 |
| Y = X >> 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |  | 7 |