**LIST OF DATATYPES:**

|  |  |  |
| --- | --- | --- |
| **Name Of a Datatype** | **Bytes** | **RANGE** |
| BYTE | 1 | ***0 to 255*** |
| USHORT | 2 | ***0 to 65,535*** |
| UINT | 4 | ***0 to 4,294,967,295*** |
| ULONG | 8 | ***0 to 18,446,744,073,709,551,615*** |
| SBYTE | 1 | ***-128 to 127*** |
| SHORT | 2 | ***-32,768 to 32,767*** |
| INT | 4 | ***-2,147,483,648 to 2,147,483,647*** |
| LONG | 8 | ***-9,223,372,036,854,775,808 to 9,223,372,036,854,775,807*** |
| FLOAT | 4 |  |
| DOUBLE | 8 |  |
| DECIMAL | 16 |  |
| BOOLEAN | True (OR) False |  |
| CHAR | 2 |  |
| STRING | Based on statement |  |

**LIST OF NUMBER SYSTEMS:**

|  |  |  |
| --- | --- | --- |
| **NAME** | **RANGE** | **BITS** |
| **BINARY** | **0 TO 1** | **2** |
| **OCTAL** | **0,1,2,3,4,5,6,7** | **8** |
| **DECIMAL** | **0,1,2,3,4,5,6,7,8,9** | **10** |
| **HEXA-DECIMAL** | **0,1,2,3,4,5,6,7,8,9, A,B,C,D,E,F.** | **16** |

**CONVERT DECIMAL TO BINARY:**

**1). 55 = (100111)2**

**2). 24 = (10000)2**

**3). 18 = (1010)2**

**CONVERT BINARY TO DECIMAL:**

**1).10110 = (22)10**

**2). 1011 = (11)10**

**3). (10110) = (46)10**