BitXor Page 1

BitXor

Obtain bitwise XOR of two 32-bit longs

#include < ToolUtils.h >

Toolbox Utilities

long
BitXor(op1, op2);

 $\begin{array}{cccc} \underline{\mathsf{long}} & \mathit{op1} \; ; & \mathsf{32\text{-bit values}} \; \ldots \\ \underline{\mathsf{long}} & \mathit{op2} \; ; & \ldots \; \mathsf{to} \; \mathsf{be} \; \mathsf{XORed} \end{array}$

returns result of (op1 ^ op2)

BitXor returns the exclusive OR (a bitwise XOR) of two 32-bit values. The operands are not changed.

```
op1 and . . . op2 are 32-bit long operands.
```

Returns: a long integer; the result of (op1 ^ op2).

Notes: A bit in the result is set to 1 when bits of *op1* and *op2* contain opposite values; other bits are cleared. Alternative explanation: the bits of *op2* "toggle" the bits of *op1*.

This capability is native to the CPU and can be performed much faster using the C ^ (bitwise XOR) operator.

```
long x, op1, op2; x = \textbf{BitXor}(\text{ op1, op2});  /* \text{ is equivalent to } ...*/x = \text{op1 } ^* \text{ op2;} /* ... \text{ and this is MUCH faster */}
```