

```

int Bitwalker_Poke(unsigned int Startposition, unsigned int Length,
                  uint8_t *Bitstream, unsigned int BitstreamSizeInBytes,
                  uint64_t Value)
{
    int __retres;
    uint64_t MaxValue;
    int i;
    /*@ assert
       rte: unsigned_overflow:
       0 <= (unsigned int)(Startposition+Length)-(unsigned int)1;
    */
    /*@ assert rte: unsigned_overflow: 0 <= Startposition+Length; */
    /*@ assert rte: unsigned_overflow: Startposition+Length <= 4294967295; */
    if (((Startposition + Length) - (unsigned int)1) >> 3 >= BitstreamSizeInBytes) {
        __retres = -1;
        goto return_label;
    }
    /*@ assert
       rte: unsigned_overflow:
       0 <=
       (unsigned long long)((unsigned long long)0x01<<Length)-(unsigned long long)1;
    */
    /*@ assert rte: shift: 0 <= Length && Length < 64; */
    MaxValue = ((unsigned long long)0x01 << Length) - (unsigned long long)1;
    if (MaxValue < Value) {
        __retres = -2;
        goto return_label;
    }
    /*@ assert
       rte: unsigned_overflow:
       0 <= (unsigned int)(Startposition+Length)-(unsigned int)1;
    */
    /*@ assert rte: unsigned_overflow: 0 <= Startposition+Length; */
    /*@ assert rte: unsigned_overflow: Startposition+Length <= 4294967295; */
    i = (int)((Startposition + Length) - (unsigned int)1);
    while (i >= (int)Startposition) {
        if ((Value & (unsigned long long)0x01) == (unsigned long long)0) {
            /*@ assert rte: mem_access: \valid(Bitstream+(int)(i>>3)); */
            /*@ assert rte: shift: 0 <= i; */
            /*@ assert rte: mem_access: \valid_read(Bitstream+(int)(i>>3)); */
            /*@ assert rte: index_bound: 0 <= (int)(i&0x07); */
            /*@ assert rte: index_bound: (int)(i&0x07) < 8; */
            *(Bitstream + (i >> 3)) = (unsigned char)((int)*(Bitstream + (i >> 3)) & ~((int)BitwalkerBitMaskTable[
                i & 0x07]));
        }
        else {
            /*@ assert rte: mem_access: \valid(Bitstream+(int)(i>>3)); */
            /*@ assert rte: shift: 0 <= i; */
            /*@ assert rte: mem_access: \valid_read(Bitstream+(int)(i>>3)); */
            /*@ assert rte: index_bound: 0 <= (int)(i&0x07); */
            /*@ assert rte: index_bound: (int)(i&0x07) < 8; */
            *(Bitstream + (i >> 3)) = (unsigned char)((int)*(Bitstream + (i >> 3)) | (int)BitwalkerBitMaskTable[
                i & 0x07]);
        }
        Value >>= 1;
        /*@ assert rte: signed_overflow: -2147483648 <= i-1; */
        i--;
    }
    __retres = 0;
    return_label: return __retres;
}

```