**Project2 Skeleton** …. The syntax might not be correct most of the time, but useful in extracting M, N , excluding the offset, locating/indexing the table entries, comparing and updating statistics, table entries (predictors) and GHB register.

M, N

M = number of bits: large table

N = Global history

Int main(….)

{

M = atoi(argv[1]);

N = atoi (argv[2]);

TRACE\_FILE = argv[3];

Int size\_of\_table = pow(2, M);

Int \* M\_TABLE = new int [size\_of\_table];

Int GHB = 0;

// Initialize each entry to 2, 1

While( file is open)

{

Int PC = line PC

Int OUTCOME = line outcome

PC = PC/4;

M\_INDEX = PC % (pow(2,M));

N\_EXT = N << (M-N);

Index = M\_INDEX ^ N\_EXT;

PREDICTION = M\_TABLE[INDEX];

// Compare prediction with outcome, and increment stats

// Make sure after updating table entry, it doesn’t exceed 3 or less than 0

If (OUTCOME)

GHB = GHB>>1 + pow(2, N-1);

Else

GHB = GHB>>1;

}

}