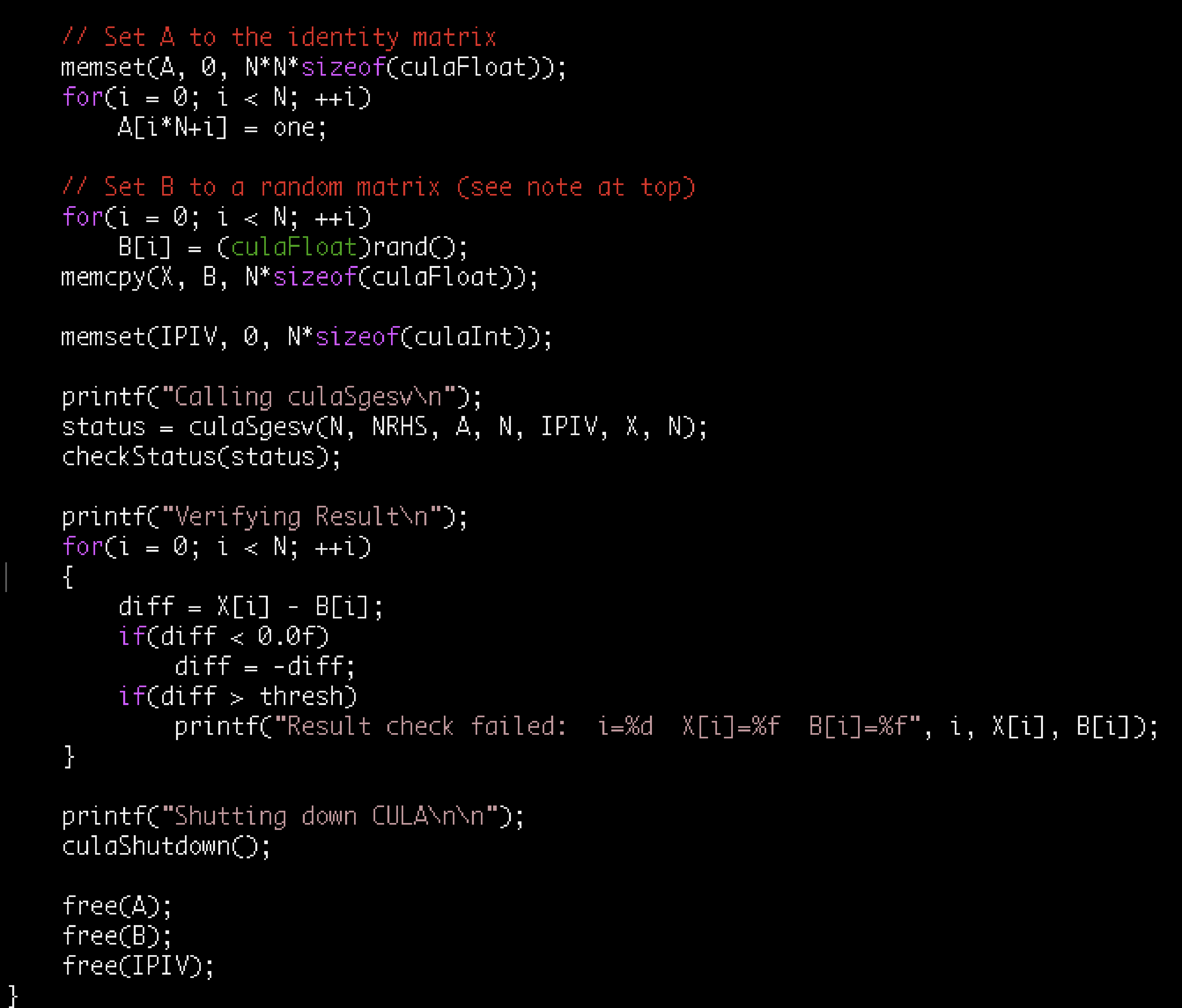

```
    // Set A to the identity matrix
    memset(A, 0, N*N*sizeof(culaFloat));
    for(i = 0; i < N; ++i)
        A[i*N+i] = one;

    // Set B to a random matrix (see note at top)
    for(i = 0; i < N; ++i)
        B[i] = (culaFloat)rand();
    memcpy(X, B, N*sizeof(culaFloat));

    memset(IPIV, 0, N*sizeof(culaInt));

    printf("Calling culaSgesv\n");
    status = culaSgesv(N, NRHS, A, N, IPIV, X, N);
    checkStatus(status);

    printf("Verifying Result\n");
    for(i = 0; i < N; ++i)
    {
        diff = X[i] - B[i];
        if(diff < 0.0f)
            diff = -diff;
        if(diff > thresh)
            printf("Result check failed:  i=%d  X[i]=%f  B[i]=%f", i, X[i], B[i]);
    }

    printf("Shutting down CULA\n\n");
    culaShutdown();

    free(A);
    free(B);
    free(IPIV);
}
```