Solve these three exercises in class using only pen and paper. When you're done, implement and test the code, and then grade yourself on a scale from 0 to 100. **Optionally,** submit with your name & date.

1. Write a declaration of an array named `weekend` containing seven `bool` values. Include an initializer that makes the first and last values `true`; all other values should be `false`, and print the array.
   Tip: to get the `bool` type, you can include the `stdbool.h` file.

```
#+begin_src C :main yes :includes <stdio.h> :results output
```

```
#+end_src
```

2. The Fibonacci numbers are 0,1,1,2,3,4,5,13,… where each number is the sum of the two preceding numbers. Write a program that declares an array named `fib` of length `20`, fills the array with the first 20 Fibonacci numbers, and prints the array. *Tip: Initialize the first two Fibonacci numbers as 1.*

```
#+begin_src C :main yes :includes <stdio.h> :results output
```

```
#+end_src
```

3. Initialize a 2 x 2 identity matrix and print it:

```
1 0
0 1
```

   Hint: A two-dimensional array `a` is defined as `a[M][N]`.

```
#+begin_src C :main yes :includes <stdio.h> :results output
```

```
#+end_src
```

Name: _____ Grade (0-100): _____