https://github.com/Aarhus-University-ECE/assignment-8-Losmobilos3

I've converted the main.cpp file to main.c, since cmake won't work on my mac, when it's a C++ file.

1.

a)

```
/* Factorial function definition */
int fact(int n)
{
  int i; /* counter variable */
  int f; /* factorial */

  /* pre-condition */
  assert (n >= 0);

  /* post-condition */
  f = 1;
  for(i = 1; i <= n; i = i + 1)
  {
    f = i * f;
  }
  return f;
}
```

1 · n

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Since we only do two arithmetic operations in the for loop, the amount of arithmetic operations needed to compute fact(5) wil be:

$$2 \cdot n = 2 \cdot 5 = 10$$

To calculate fact(5), we need to do 10 arithmetic operations.

b)

As formerly mentioned, to calculate fact(n), we need to perform $2 \cdot n$ arithmetic operations.