COS 487: Theory of Computation **Fall 1997**

Handout 1: September 15

Sanjeev Arora

What is the following pseudo-code program doing? Does it ever print "Hello World"?

```
int    limit, done, x, y, z, n;
limit = 2;
done = 0;
while (done == 0)
{
    limit++;
    for n = 3 to limit do
        for x = 2 to (limit −n) do
            for y = 2 to (limit −n − x) do
                for z = 2 to (limit −n − x − y) do
                    if (x^n + y^n == z^n)
                        done =1;
}
printf("Hello World!");
```