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load list

```
tic
clear

list=fopen('list.txt');
M=textscan(list,'%s');
fclose(list);
```

define variables

```
trees=0;
x=1;
y=1;

slopes=ones(2,5);
slopes(1,1:4)=1:2:7;
slopes(2,5)=2;

f=ones(1,length(slopes(1,:)));
```

tree collisions

```
for i=1:length(slopes(1,:))
    while y<=length(M{1})-slopes(2,i)
        x=mod(x+slopes(1,i)-1,length(M{1}{1}))+1;
        y=y+slopes(2,i);
        if M{1}{y}(x)=='#'
            trees=trees+1;
        end
    end
    f(i)=trees;

    %reset map
    trees=0;
    x=1;
    y=1;
end
```

answers

```
disp(['Part 1 = ', num2str(f(2))])
```

```
disp(['Part 2 = ', num2str(prod(f))])
toc
```

Part 1 = 257
Part 2 = 1744787392
Elapsed time is 0.053156 seconds.

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