Question 1 (50%)

Sum of a geometric progression. A geometric progression is defined by two numbers, the initial term a and a common ratio r:

$$a, ar, ar^2, ar^3 \ldots$$

For instance with $a = 7$ and $r = 2$, you'll have:

$$7, 14, 56, 112, \ldots$$

The sum of the first n terms of a geometric progression with the initial term a and the common ration r is:

$$\sum_{j=0}^{n} ar^i = a + ar + ar^2 + \ldots + ar^n$$

Define a recursive procedure that returns the sum of a geometric progression with n terms and the initial term a and the common ration r.

Question 2 (50%)

`(RANDOM N)` returns a random number between and including 0 and $n-1$. Define a procedure that takes two arguments n and r, and prints r random numbers between and including 0 and n. You will need to use `PRINT`; you can discover how it works by trying it at `REPL`.