

Loops :

most generally useful :

while (**condition**
(boolean expr))

{

body of loop

}

condition if true, proceed one
time through loop
if false - go past end
of loop, continue

most used : for

for (int i=0; i<n; i++)

{

body of loop

}

n times through loop

problem: write a method
which counts the
instances of a character
sequence in a String.

method: `int countSeq(
String s,
String seq)`

declaration of 2 strings:

`String s, seq;`

argument list:

`(String s, String seq)`

Ex: `s: "I have no porpoise."`
`seq: "grit"`

result: 0

Ex: (same s)

`seq: "o"`

result: 3

Ex : s : "Frog frog frogger froggie"

seq : ""

return : -1

options :

- yes → ① refuse to allow empty string as input (Precondition)
- X ② raise an exception (run-time error, requires handler)

```
public int countSeq (
    String s, String seq)
{
    if (seq.length() == 0)
        return -1;
    int count = 0;

    while

}
```