

**Lab 04 - Assignment**  
**Loops**  
**CS 112 – Summer 2022**

**Description**



Hansel and Gretel are into the woods and Hansel leaves a trail of breadcrumbs to return home, but they get lost because the birds have eaten the crumbs. However, they find a big hut made of cake and sweets, and start to eat its roof. Do you want to know what happened? You can read the complete fairy tale written by the German Brothers Grimm and published in 1812.

Hansel wants your help to see what the breadcrumb trail looks like and how many crumbs were left on the trail



**Facts you already know:**

- There are **14 yards** between the home of Hansel and Gretel and the hut made of sweets
- There are **4 trees** on the path, one just after his house and one just before the cottage
- There is the same distance between each tree
- When there is no tree in the way, Hansel only leaves the crumbs after one yard

**Requirements:**

- Use `while-loop` to draw the path (i.e. trees and breadcrumbs)
- Draw the path in the same line (Hint: use `end=" "`)
- Use emojis similar (not necessary the same) to those in this Lab description

**Output:**

- What the breadcrumb trail looks like
- Number of breadcrumbs on the trail

**Allowed things:**

- Any arithmetic operators are all fine to use, such as `+`, `-`, `*`, `**`, `/`, `%`, and, or, `=`, etc.
- Any relational operator: `<`, `<=`, `==`, etc.
- Branching: `if`, `if-else`, `if-elif-else`
- These functions `print()`, `round()`, `type()`, `int()`, `float()`, `str()`

**Disallowed things:**

- You are not allowed to `import` anything
- You are not allowed to use any features not covered in lecture yet
- No hard coding (to determine the number of breadcrumbs use an arithmetic operation)