Sequential Logic Structure

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Flowchart</th>
<th>Pseudocode</th>
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</table>
| 5. Instruction  
6. Instruction  
7. Instruction  
8. | Instruction  
   Instruction  
   Instruction  
   Instruction  | Instruction  
   Instruction  |

*Order matters!*
Python Sequential Logic

0. print("   *   ")
1. print("   ***   ")
2. print("   *****   ")
3. print("   ********   ")
4. print("   **********   ")
# Decision Logic Structure

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<tr>
<td>5. If &lt;decision&gt; then Instruction else Instruction</td>
<td><img src="image" alt="Decision Logic Flowchart" /></td>
<td>If &lt;decision&gt; then Instruction else Instruction Endif</td>
</tr>
<tr>
<td>6. :</td>
<td><img src="image" alt="Decision Logic Flowchart" /></td>
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- **Start**
- **Decisions**
- **F**
- **T**
- **Instruction**
- **End**
- **Sequential stmts**
Loop Logic Structure

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5. Loop
   - Instruction
   - Instruction
   - Instruction
   - Until <logical expression>

6. ...
```python
x = 1
if x == 1:
    print("*")
elif x == 3:
    print("***")
else:
    print("*******")
```
Loop Logic Structure

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5. Loop
   Instruction
   Instruction
   Instruction
   Until <logical expression>

6. :

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: Loop
  Instruction
  Instruction
  Instruction
  Until <logical expression>

: :
Python Loop Logic

for x in range(7):
    print("\*", end="\")

OR

x=1
while(x<=7):
    print("\*", end="\")
    x+=1

if no start, then start at zero

range(start, end) = range(5, 10) # implied steps of 2
range(start, end, step) = range(5, 10, 2)
Quiz #3: Problem Statement

• Group of 4-5 (or more)...

• For all the employees in our company, calculate their gross pay based on their hours and pay rate.
num = int(input("Enter num employees: "))
for x in range (num):
    pay = float(input("Employee " + str(x+1) + " pay: "));
    hours = float(input("Employee " + str(x+1) + " hours: "));
    wages = pay * hours;
    print("Your gross pay is " + str(wages));