Indexing and Slicing

1. **Basic Indexing:**
   Given the string:
   text = "Python Programming"
   - **Extract the first character.**
   - **Extract the last character.**
   - **Extract the 7th character from the string.**

```python
text = "Python Programming"
text[0]
'P'
text[-1]
'g'
text[6]
' '
```

2. **Slicing:**

   - **Extract the substring "Python" from text.**
   - **Extract the substring "Programming" from text.**
   - **Extract every alternate character from the string.**
   - **Reverse the string using slicing.**

```python
text[0:6]
'Python'
text[7:18]
'Programming'
text[::2]
'Pto rgamn'
text[::-1]
'gnimmargorP nohtyP'
```

3. **Nested Indexing:**
   Given the string: nested_text = "Learn Python [Basics]"
   - **Extract the substring "Basics" using slicing.**
   - **Extract the square brackets ([]) along with the word "Basics".**

```python
nested_text = "Learn Python [Basics]"
nested_text[14:20]
'Basics'
nested_text[13:21]
'[Basics]'
```