

```
def longest_palindrome(s):
```

```
    if not s:
```

```
        return ""
```

```
    n = len(s)
```

```
    dp = [[False] * n for _ in range(n)]
```

```
    max_length = 1
```

```
    start = 0
```

```
    # الخطوة الأولى: ملء قطر الجدول
```

```
    for i in range(n):
```

```
        dp[i][i] = True
```

```
    # الخطوة الثانية: إيجاد أطول سلسلة فرعية متماثلة
```

```
    for length in range(2, n + 1):
```

```
        for i in range(n - length + 1):
```

```
            j = i + length - 1
```

```
            if length == 2:
```

```
                dp[i][j] = (s[i] == s[j])
```

```
            else:
```

```
                dp[i][j] = (s[i] == s[j]) and dp[i + 1][j - 1]
```

```
            if dp[i][j] and length > max_length:
```

```
                max_length = length
```

```
                start = i
```

```
    return s[start:start + max_length]
```