# This is a title

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## Contents



## 1 This is the section name

### 1.1 This is the subsection name

**Theorem 1.1.1 Name of thm.**
This is a theorem. We can refer to the theorem by Theorem 1.1.1

**Definition 1.1.1 (Name for df).** This is a definition. We can refer to the df by Definition 1.1.1

**Example 1.1.1** This is an example

***Answer 1.1.1***

□

**Remark** *This is a remark*

***Proof 1.*** This is a proof ■

**Corollary 1.1** *This is a corollary*

**Lemma 1.1** *This is a lemma*

**Proposition 1.1.1** *This is a proposition*

**Conjecture 1.1.1** *This is a conjecture*

**Axiom 1.1**

Answer.m

```m
% Plot function f(x) = 2*x^3 - x - 2
ezplot('2*x^3-x-2', [0, 2])
hold on
plot([0, 2], [0, 0], 'r')
```

```python
def __self__(self):
for i in range(10):
    print(f"This number is {i}.")
```

```java
public static void main(String[] args) {
    System.out.println("Hello World!"); // comment
}
```

**Algorithm 1:** Bisection Algorithm

**Input:** $a, b, M, \delta, \varepsilon$
$u \leftarrow f(a)$
$b \leftarrow f(b)$
$e \leftarrow b - a$
**Output:** output

```
begin
    if sign(u) = sign(v) then
        stop
    for k=1 to M do
        e ← e/2
        c ← a + e
        w ← f(c)
        return k, c, w, e
        if |e| < δor |w| < ε then
            stop
        if sign(u) ≠= sign(v) then
            b ← c
            v ← w
        else
            a ← c
            u ← w
```