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.

Definition 1.1.2 (Name for df). This is a definition.

> **Example 1.1.3** This is an example
>   ***Solution 1.***
>
>   □

Remark. *This is a remark*

   Proof 2. This is a proof   ■

Corollary 1.1.4 This is a corollary

Lemma 1.1.5 This is a lemma

Proposition 1.1.6 This is a proposition

Conjecture 1.1.7 This is a conjecture

Axiom 1.1.8 This is an axiom.

Answer.m

```matlab
% 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
1  def __self__(self):
2  for i in range(10):
3      print(f"This number is {i}.")
```

```java
1  public static void main(String[] args) {
2      System.out.println("Hello World!"); // comment
3  }
```

Algorithm 1: Bisection Algorithm

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

```
 1  begin
 2      if sign(u) = sign(v) then
 3          stop
 4      for k=1 to M do
 5          e ← e/2
 6          c ← a + e
 7          w ← f(c)
 8          return k, c, w, e
 9          if |e| < δ or |w| < ε then
10              stop
11          if sign(u) ≠= sign(v) then
12              b ← c
13              v ← w
14          else
15              a ← c
16              u ← w
```