Next Silicon: CM Home Assignment

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Contents

1 Introduction

This report contains the responses to the tasks stated in the home project pdf. It is accompanied with the repository that contains reproducible solutions with the installation instructions alongside: experiments and tests according to the task requirements.

2 Code Analysis and Documentation

In this section we analyze the existing code

1: **Input:** An array of integers
2: **Output:** Sorted array
3: **Steps:**
4:

```c
float fp32_custom_sine(float x)
{
    x = fmodf(x, 2.0f * (float)M_PI);
    if (x > (float)M_PI)
        x -= 2.0f * (float)M_PI;
    else if (x < -(float)M_PI)
        x += 2.0f * (float)M_PI;
    float result = 0.0f;
    float term = x;
    float x_squared = x * x;
    int sign = 1;
    for (int n = 1; n <= 7; n += 2)
    {
        result += sign * term;
        sign = -sign;
        term = term * x_squared;
        term = term / (float)(n + 1);
        term = term / (float)(n + 2);
    }
    return result;
}
```

Algorithm 1: Algorithm with Code Listing

2.1 Subsection Title

You can insert figures:

2.2 Lists

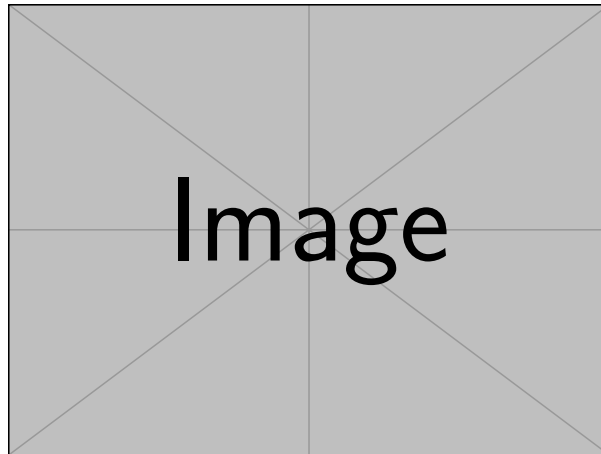- First item

- Second item

Figure 1: An example image.

3 Conclusion

Summarize your findings or thoughts here. [1]

References

[1] Tom M Apostol. Mathematical analysis. Narosa Publishing House Pvt. Ltd., 1985.