## RSA and El-Gamal Cryptosystems

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**Abstract**—In this paper we discuss the RSA and El-Gamal cryptosystem. Alongside we introduce our way of implementing them in Python and C.

Keywords—RSA, El-Gamal, Implementation, Public Key, Cryptosystem

## 1 Introduction

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mds January 11, 2007

## 1.1 Subsection Heading Here

Subsection text here.

## 2 PUBLIC KEY CRYPTOSYSTEM

**PKCS** 

#### 2.1 More Details

Some problems with this template...I mean, the subsubsection part.

## 3 RSA

This is just another testing case.

#### 4 EL-GAMAL CRYPTOSYSTEM

## 4.1 Background

Something will be added here.

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## 4.2 Basic El-Gamal Encryption

Well, I really want to finish those stuff as soon as possible. In this way I have to abort something else.

1

## 4.3 Generalized El-Gamal Encryption

Life is so damn hard. Isn't it?

#### 4.4

### **5** IMPLEMENTATION

Implementation process will be discussed here. Let the hunt begin [1].

#### 6 CONCLUSION

Conclusion and Contributions.

## APPENDIX A

# PROOF OF THE FIRST ZONKLAR EQUA-

Appendix one text goes here.

#### APPENDIX B

## SOME RELATED MATH STUFF WILL BE DISPLAYED HERE

Appendix two text goes here.

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#### REFERENCES

[1] T. Elgamal, "A public key cryptosystem and a signature scheme based on discrete logarithms," *Information Theory, IEEE Transactions on*, vol. 31, no. 4, pp. 469–472, 1985.

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