

CS641

Modern Cryptology
Indian Institute of Technology, Kanpur

Group Number: 261

Kurt Gödel (280406), Bertrand Russell
(180572), Alonzo Church (140603)

Mid-Sem Exam

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Question 1

Your question goes here.

Solution

Your solution goes here. If you want to state a theorem, then do it in the following way -

Theorem 1.1. For all natural numbers n , $\sum_{i=1}^n i = n(n+1)/2$.

Proof. We will induct over n to prove the theorem. When $n = 1$ then the statement is vacuously true. Let the statement be true for $(n-1)$. Then,

$$\sum_{i=1}^n i = \sum_{i=1}^{n-1} i + n \tag{1.2}$$

$$= \frac{(n-1)n}{2} + n = \frac{n(n+1)}{2}. \tag{1.3}$$

□

Explore the *macro.tex* for more such typesetting like claims, propositions, proof sketch etc. You could define your own as well. If labeled properly, you could refer theorems like **Theorem 1.1** or equations like **Equation 1.3**.

Reference to a book or a paper in your assignment, then do the following.

1. Find a Bibtex entry using scholar.google.com and then add it to *./bib/references.bib*.
2. Use the *Key* to reference it like **[RK12]**.

References

- [RK12] Kenneth H Rosen and Kamala Krithivasan. *Discrete mathematics and its applications: with combinatorics and graph theory*. Tata McGraw-Hill Education, 2012.