# Design and Analysis of Algorithms
## Theory Project

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# Contents

# 1 Abstract

# 2 Problem Statement

Given a set of points $P$ arranged along the boundary of a circle and a family of arcs $\mathcal{A}$ such that every arc $A \in \mathcal{A}$ contains a consecutive set of points from $P$. Find a subset $P'$ of $P$ such that every arc contains at least one point in $P'$ and $|P'|$ is minimized.

# 3 Algorithm

# 4 Proof of Correctness

# 5 Pseudo Code

# 6 Running-Time Analysis

## References

[1]