Session #4

Loops, and Functions

ICPC SCU

Session Structure

- Introduction: Importance of loops and functions in programming
- Loops: What are loops? How do they affect the flow of the program?
- Types of loops: For, While, Do .. While, do they differ?
- Functions: What are functions? How do they affect our code?
- Built-in functions
- Function call expression
- Building our own functions
- Return statements
- Parameters vs Arguments
- Let’s do some changes to previously designed algorithm using these new concepts

Loops: important points

- Programmer’s efficiency through redundancy reduction
- Scalability through handling a large number of repetitive tasks
- Programmer’s efficiency through readability enhancement and making program’s flow clear

Functions: important points

- Modularity: break down a program into smaller, manageable pieces, promoting modular programming and separation of concerns to make the program easier to understand, debug, and maintain
- Abstraction: abstract complex operations to provide a higher-level view of the code. You only need to know what it does, and how to use it