final\_prep.md 12/26/2022

# **Final Preparation**

## L5, L6.1, L6.2

- 1. What do you mean by binding? what are the possible binding times?
- 2. Differentiate between static and dynamic binding.
- 3. Differentiate between explicit and implicit binding.
- 4. What are the categories of variables base on lifetimes?
- 5. What do you mean by scope of variable? differentiate between global and local variable.
- 6. What are the primitive data types? Explain the IEEE floating point standard 754.
- 7. Explain different types of strings in different languages with the string operation.
- 8. Explain different ty[es of enumarated data types with example.
- 9. Explain array data type with its indexing, binding, intitialization and heterogenity.
- 10. How is two dimensional/multidimensional array implemented?
- 11. What do yo mean by record data type? What operations are allowed for record data types?
- 12. How is a record data type implemented? Explain with example.
- 13. Explain list data with example.
- 14. How does Unim data type differ from record?
- 15. What are the speciality of pointer/reference data type? What are the operations allowed for pointer type data? Explain with example.
- 16. What are the main problems with pointer?
- 17. Explain dangling pointer with example.
- 18. What do you mean type checking? Explain coersion null with example.

#### L7, L8

- 19. Explain different types of operators and precedence and associativity.
- 20. Explain the conditional expressions with example.
- 21. Explain the referential transparency or common subexpression elemination with example.
- 22. What do you mean by operator overloading? Explain with example.
- 23. Exaplain different types of type conversions with example.
- 24. Explain different types of assignment statements (Conditional targets and multiple assignments).
- 25. Write down different types of control statement.
- 26. Explain nested if-then-else statements with example.
- 27. How is a switch-case statement can be converted to if-then-else statement? Explain with example.
- 28. Explain different types of loop statements in C/C++ with example.
- 29. What are the use of "break" and continue statement in C/C++? Explain with example.

# L9.1, L9.2

- 30. Define sybprogram, sybprogram call and parameter profile.
- 31. Differentiate between formal parameter and actual parameter.
- 32. Differentiate between procedure and function.
- 33. Explain different types of parameter passing with example.
- 34. Differentiate between pass-by-values pass by variable reference and pass by name.
- 35. Explain call semantics and return semantics.

final prep.md 12/26/2022

- 36. What do you mean by activation record? Explain with example in C/C++.
- 37. Explain the activation record of recursion fatorial function/recursive fibonacci number.
- 38. Explain the nested subprogram with example.

## L10, L11

- 39. What do you mean by abstract data type(ADT)? What are the conditions of ADT?
- 40. What are the advantages of ADT?
- 41. What do you mean by encapsulation? How can information be hided in C++? Explain with example.
- 42. What are the uses of constructor and destructor?
- 43. Write down the stck ADT in C++.
- 44. What do you mean by frind function/class?
- 45. What do you mean by inheritance in C++?
- 46. What do you mean by abstract method/class?
- 47. Differentiate between subclass and superclass.
- 48. What do you mean by single and multiple inheritance? Explain with Example.
- 49. Differentiate between operator and functional overloading. Explain with example.