

Subprogram:

A subprogram means a function or procedure.

For example

```
void main()  
{  
}
```

```
int show()  
{  
}
```

Some of the design issues of subprogram are:

- Are local variables static or dynamic?
- Can subprogram definitions appear in other subprogram definitions?
- What parameter-passing method or methods are used?
- Are the types of the actual parameters checked against the types of the formal parameters?
- If subprograms can be passed as parameters and subprograms can be nested,
- what is the referencing environment of a passed subprogram?
- Can subprograms be overloaded?
- Can subprograms be generic?
- If the language allows nested subprograms, are closures supported?

Some definitions to be know:

1. An overloaded subprogram

An overloaded subprogram is one that has the same name as another subprogram in the same referencing environment.

2. A generic subprogram

A generic subprogram is one whose computation can be done on data of different types in different calls.

3. A closure

A closure is a nested subprogram and its referencing environment, which together allow the subprogram to be called from anywhere in a program.

Related posts:

1. Sequence Control & Expression | PPL
2. PPL:Named Constants
3. Parse Tree | PPL | Prof. Jayesh Umre
4. Basic elements of Prolog
5. Loops | PPL | Prof. Jayesh Umre
6. Subprograms Parameter passing methods | PPL | Prof. Jayesh Umre
7. Programming Paradigms | PPL | Prof. Jayesh Umre
8. Subprograms Introduction | PPL | Prof. Jayesh Umre

9. Phases of Compiler | PPL | Prof. Jayesh Umre
10. Parse Tree | PPL
11. Influences on Language design | PPL | Prof. Jayesh Umre
12. Fundamentals of Subprograms | PPL | Prof. Jayesh Umre
13. Programming Paradigm
14. Influences on Language Design
15. Language Evaluation Criteria
16. OOP in C++ | PPL
17. OOP in C# | PPL
18. OOP in Java | PPL
19. PPL: Abstraction & Encapsulation
20. PPL: Semaphores
21. PPL: Introduction to 4GL
22. PPL: Variable Initialization
23. PPL: Conditional Statements
24. PPL: Array
25. PPL: Strong Typing
26. PPL: Coroutines
27. PPL: Exception Handler in C++
28. PPL: OOP in PHP
29. PPL: Character Data Type
30. PPL: Exceptions
31. PPL: Heap based storage management
32. PPL: Primitive Data Type
33. PPL: Data types
34. Programming Environments | PPL
35. Virtual Machine | PPL

36. PPL: Local referencing environments
37. Generic Subprograms
38. Local referencing environments | PPL | Prof. Jayesh Umre
39. Generic Subprograms | PPL | Prof. Jayesh Umre
40. PPL: Java Threads
41. PPL: Loops
42. PPL: Exception Handling
43. PPL: C# Threads
44. Pointer & Reference Type | PPL
45. Scope and lifetime of variable
46. Design issues for functions
47. Parameter passing methods
48. Fundamentals of sub-programs
49. Subprograms
50. Garbage Collection
51. Issues in Language Translation
52. PPL Previous years solved papers
53. Type Checking | PPL | Prof. Jayesh Umre
54. PPL RGPV May 2018 solved paper discussion| Prof. Jayesh Umre
55. PPL Viva Voce
56. PPL RGPV June 2017 Solved paper | Prof. Jayesh Umre
57. Concurrency
58. Basic elements of Prolog
59. Introduction and overview of Logic programming
60. Application of Logic programming
61. PPL: Influences on Language Design
62. Language Evaluation Criteria PPL

- 63. PPL: Sequence Control & Expression
- 64. PPL: Programming Environments
- 65. PPL: Virtual Machine
- 66. PPL: Programming Paradigm
- 67. PPL: Pointer & Reference Type
- 68. try-catch block in C++