

Program in C language

PDLC

- *In order to develop a program, a special procedure to be followed which is called Program development life cycle (PDLC).*



Program definition and analysis

- *The first phase is identify and define problem.*
- *For this ,using the basic steps ,input, processing and output*
- *if the problem is solved ,at the end agreement is done between user and the programmer.*
- *Before tackling the problem logically, the nature of the problem must be fully understood by the programmers.*

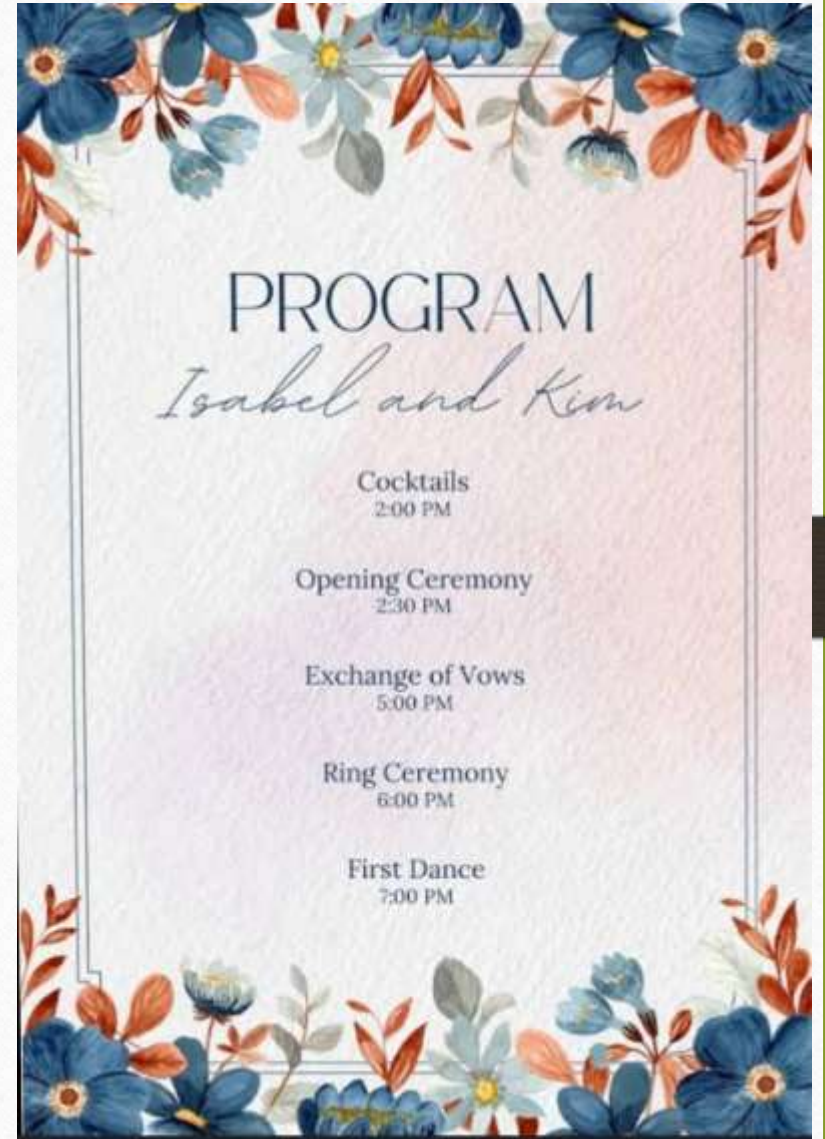
Program design

Programmer must have proper understanding of the behavior of the problem.

Behavior can be describe in term of necessary inputs and required output.

Program design in different techniques like algorithm or flowchart.

Programmer design a program which meets the best requirements of the user.



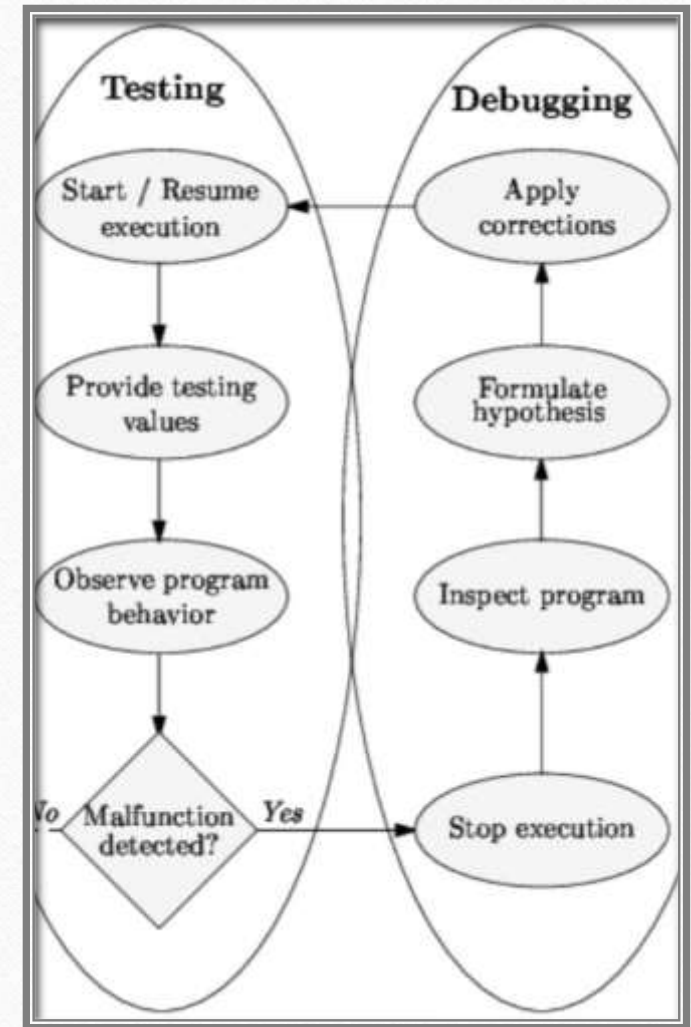
Coding

- The programmer translates the step of algorithm or flowchart in a computer program using a language such as C and is called as coding.

```
1 from odoo import http
2 from odoo.exceptions import ValidationError
3 from datetime import datetime
4 import calendar
5 import math
6 import pytz
7 import io, base64
8
9
10 class AdmissionExtensionOnlineController(http.Controller):
11
12     @http.route('/get/type_wise_program', website=True)
13     def type_wise_program(self, **kwargs):
14         if len(kwargs['types']) <= 0:
15             return "None"
16
17         types = kwargs['types']
18         program_list = []
19         domain = []
20
21
22         if types == 'local_bachelor_program_hsc':
23             domain = [('course_id.is_local_bachelor_
24 elif types == 'local_bachelor_program_a_level':
25             domain = [('course_id.is_local_bachelor_
26 elif types == 'local_bachelor_program_diploma':
27             domain = [('course_id.is_local_bachelor_
28 elif types == 'local_masters_program_bachelor':
29             domain = [('course_id.is_local_bachelor_
30 elif types == 'international_bachelor_masters_program':
31             domain = [('course_id.is_international_bachelor_
32 elif types == 'international_masters_program_bachelor':
33             domain = [('course_id.is_international_bachelor_
34 elif types == 'international_masters_program_bachelor':
35             domain = [('course_id.is_international_bachelor_
36
37         domain.append(('state', '=', 'application'))
38         admission_register_list = http.request._request_data.get('admission_register_list')
39         for program in admission_register_list:
40             # ...
```

Debugging and testing

- *A bug is an error in a computer program.*
- *The process of eliminating the errors in the program is called as Debugging*
 - *Detection can be accomplished by testing a new program.*
 - *Different errors can be eliminated by using various methods.*
 - *Testing is also done to make sure that the program is correct.*



Maintenance

- *program development program which is altogether ready, is installed at the sight of user.*
- *User may have some error and the programmer has to maintain all these errors and do all necessary changes.*
- *Maintenance of the program is compulsory, so that there must not be any problem in the output of program.*

