

## Algorithms and flowcharts

**Algorithms and flowcharts** are two different tools used for creating new programs, especially in computer programming. An algorithm is a step-by-step analysis of the process, while a **flowchart** explains the steps of a program in a graphical way.

### Algorithm:

Step1: Start

Step2: Read\input the first num1.

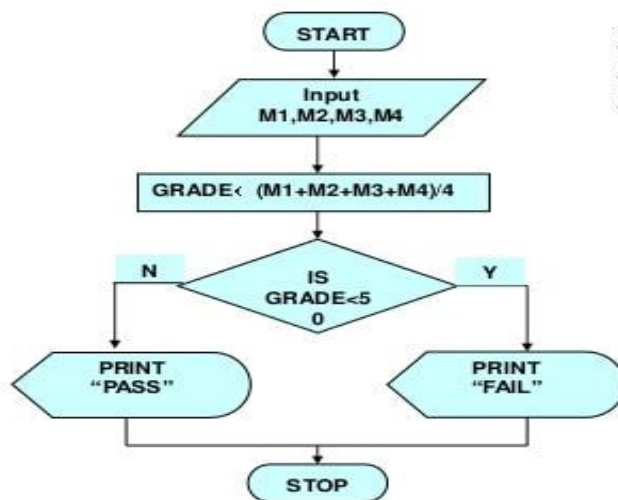
Step3: Read\input the second num2.

Step4: Sum num1+num2 // calculation of sum

Step5: Print Sum

Step6: End

### EXAMPLE 1



Step 1: Input M1, M2, M3, M4  
Step 2:  $GRADE \leftarrow (M1+M2+M3+M4)/4$   
Step 3: if (GRADE < 50) then  
    Print "FAIL"  
    else  
    Print "PASS"  
endif

# PROGRAMME PLANNING

## 15.1 Introduction

Programme development is an on-going dynamic process that extension professionals intuitively follow as they plan, implement and evaluate their educational programmes. This area becomes well-defined after the situations and the objectives are determined by the leaders, extension professionals and specialists.

## 15.2 Need and Interest

### 15.2.1 Need

Need is lack of something. Need is the difference between "what is" and "what ought to be".

### 15.2.2 Interest

Interest may be defined as a desire on the part of an individual to learn, study or gain more information and skill about some field or subject matter that he thinks of value to him.

## 15.3 Concept, Objectives and Principles of Programme Planning

Programme planning is a procedure of working with the people in an effort to recognise unsatisfactory situations or problems and to determine possible solutions or objectives and goals.

### 15.3.1 Programme

An extension programme is a statement of situation, objectives, problems and solutions (Kelsey and Hearne, 1949).

### 15.3.2 Planning

*Planning is designing a course of action to achieve ends.*

### 15.3.3 Programme planning

Programme planning is the process of making decisions about the direction & intensity of extension-education efforts of extension-service to bring about social, economic & technological changes.

### 15.3.4 Objectives of programme

The general objective of having an extension programme is to influence people to make changes in their way of life and making a living.

- } To ensure careful consideration of what is to be done and why.
- } To furnish a guide against which to judge all new proposals.
- } To establish objectives toward which progress can be measured and evaluated.
- } To have a means of choosing the important (deep rooted) from incidental (less important) problems; and the permanent from the temporary changes.
- } To develop a common understanding about the means and ends between functionaries and organizations.
- } To ensure continuity during changes of personnel.
- } To help develop leadership.
- } To avoid wastage of time & money and promote efficiency.
- } To justify expenditure and to ensure flow of funds.
- } To have a statement in written form for public use.

### 15.3.5 Principles of extension programme planning

Programme planning has certain principles which holds good irrespective of the nature of the clientele and the enterprises they may be pursuing, viz.:

- } Extension programmes should be based on an analysis of the past experiences, present situation and future needs.
- } Extension programmes should have clear and significant objectives which could satisfy important needs of the people.
- } Extension programmes should fix up priority on the basis of available resources and time.
- } Extension programmes should clearly indicate the availability and utilization of resources.
- } Extension programmes should have a general agreement at various levels.
- } Extension programmes should involve people at the local level.
- } Extension programmes should involve relevant institutions and organization.
- } Extension programme should have definite plan of work.
- } Extension programme should provide for evaluation of results and reconsideration of the programme.
- } Extension programmes should provide for equitable distribution of benefits amongst the members of the community.

#### 15.4 Programme-Planning Process

Program development involves: analysing the situation or context; setting objectives/priorities and; designing an action plan; implementing the plan; evaluating inputs, outputs, outcomes, and reconsider the weak and strong points of the programme.



**Fig. 15.1 Steps of programme planning**

##### 15.4.1 Collection of facts

Sound plans are based on availability of relevant & reliable facts. This includes facts about the village people, physical conditions, existing farm & home practices, trends & outlook. Besides, other facts about customs, traditions, rural institutions, peoples' organisations operating in the area, etc. should be collected. The tools & techniques for collecting data include systematic observations, a questionnaire, interviews & surveys, existing governmental records, census reports, reports of the Planning Commission, Central Bureau of Statistics, and the past experiences of people.

##### 15.4.2 Analysis of the situation

After collecting facts, they are analysed and interpreted to find out the problems & needs of the people.

##### 15.4.3 Identification of problems

As a result of the analysis of facts, the important gaps between 'what is' & 'what ought to be' are identified and the problems leading to such a situation are located. These gaps represent the people's needs.

#### **15.4.4 Determination of objectives**

Once the needs & problems of the people have been identified, they are stated in terms of objectives & goals. The objectives represent a forecast of the changes in the behaviour of the people and the situation to be brought about. The objectives may be long-term as well as short-term, and must be stated clearly.

#### **15.4.5 Developing the plan of work**

In order to achieve the stated objectives & goals, the means & methods attaining each objective are selected; and the action plan, i.e. the calendar of activities is developed. It includes the technical content, who should do what, and the time-limit within the work will be completed. The plan of work may be seasonal, short-term, annual or long-term.

#### **15.4.6 Execution of the plan of work**

Once the action plan has been developed, arrangement for supplying the necessary inputs, credits, teaching aids, extension literature etc. has to be made and the specific action has to be initiated. The execution of the plan of work is to be done through extension methods for stimulating individuals and groups to think, act and participate effectively. People should be involved at every step to ensure the success of the programme.

#### **15.4.7 Evaluation**

It is done to measure the degree of success of the programme in terms of the objectives & goals set forth. This is basically done to determine the changes in the behaviour of the people as a result of the extension programme. The evaluation is done not only of the physical achievements but also of the methods & techniques used and of the other steps in the programme planning process, so that the strong & weak points may be identified and necessary changes may be incorporated accordingly.

#### **15.4.8 Reconsideration**

The systematic and periodic evaluation of the programme will reveal the weak and strong points of the programme. Based on these points, the programme is reconsidered and the necessary adjustments & changes are made in order to make it more meaningful & sound.