


Adam Mukharil Bachtiar
English Class
Informatics Engineering 2011

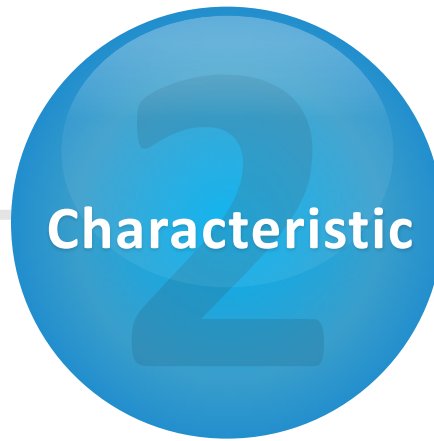


Algorithms and Programming

Sequential Structure



Steps of the Day



Let's Start 





Definition

Definition 

Definition of Sequential Structure

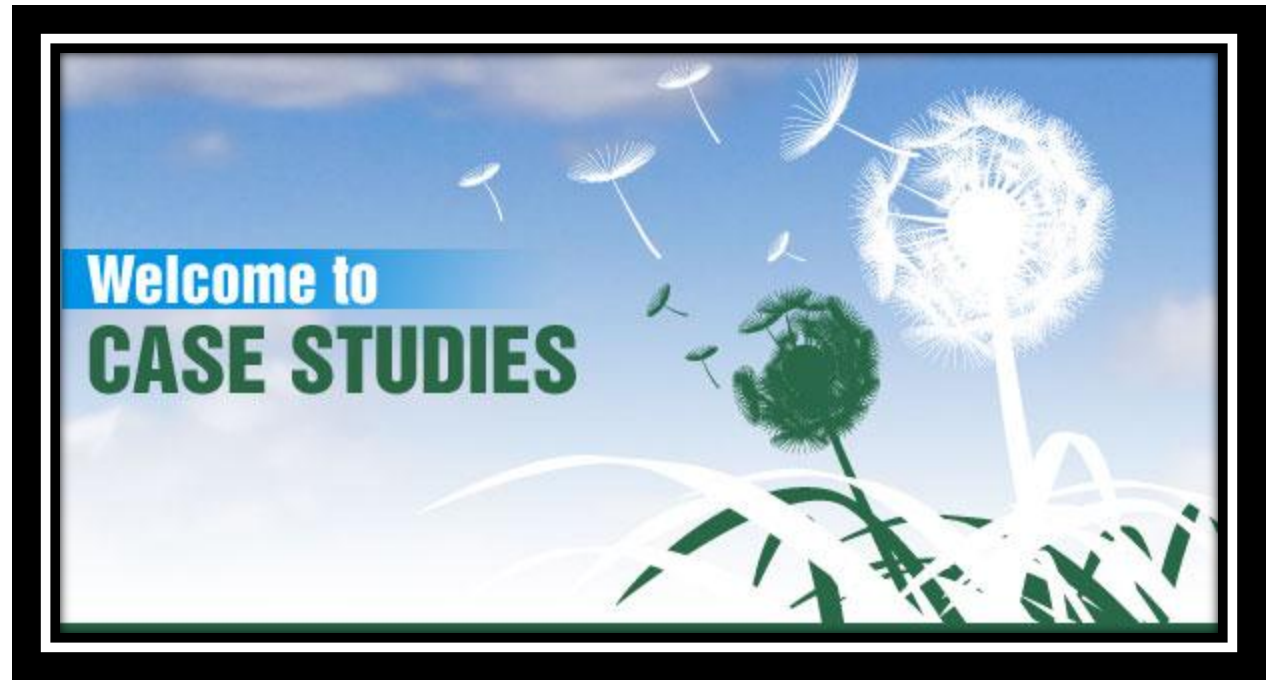
- **The simplest** and **basic** structure in algorithm.
- Instruction was processed in **sequential way**
(top down approach).



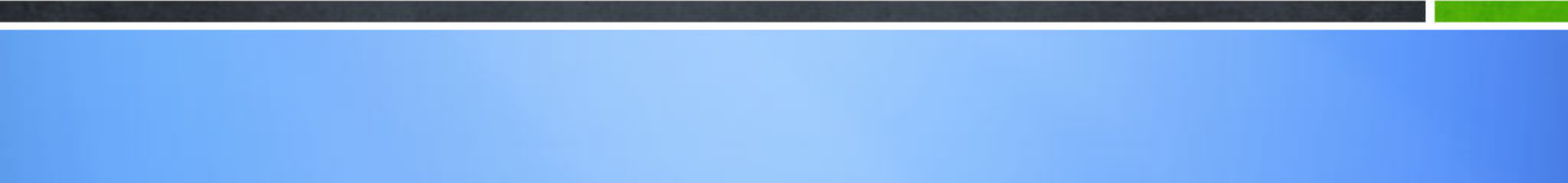
Characteristics of Sequential Structure

All about Sequential Structure

- Each instruction was processed **one by one**.
- **No repeateance** in each instruction.
- The last instruction is **the end of algorithm**.
- Sequence of instructions **is same** with
sequence of instructions in Algorithm



Welcome to
CASE STUDIES



Case of Employee's Salary

UNIKOM has **n employees** with salary assumptions such as:

- Salary of each employee was **equal** each other.
- Salary was counted by **basic salary + allowance - tax** .
- The tax is **10 % from basic salary** before added by allowance.
- Allowance is **20% from basic salary**.
- Basic salary **can be changed**.

Calculate salary that UNIKOM must be pay to all employees, detail of tax, and detail of allowance for each employee

Algorithm of Employee's Salary

```
1  Algoritma Gaji_Karyawan
2  {I.S: Jumlah karyawan dan Gaji pokok diinput oleh user}
3  {F.S: Menampilkan gaji, pajak, dan tunjangan karyawan}
4
5  Deklarasi:
6      gaji_pokok,gaji,jml_gaji:real
7      pajak:real
8      tunjangan:real
9      jml_karyawan:integer
10
11 Algoritma:
12     input(jml_karyawan,gaji_pokok)
13     pajak←0.1*gaji_pokok
14     tunjangan←0.2*gaji_pokok
15     gaji←gaji_pokok+tunjangan-pajak
16     jml_gaji←gaji*jml_karyawan
17     output('Pajak perorang= Rp. ',pajak)
18     output('Tunjangan perorang= Rp. ',tunjangan)
19     output(Gaji ',jml_karyawan,' orang karyawan= Rp. ',jml_gaji)
```

Pascal Code of Employee's Salary

```
1  program Gaji_Karyawan;
2  uses crt;
3
4  var
5      gaji_pokok,gaji,jml_gaji:real;
6      pajak:real;
7      tunjangan:real;
8      jml_karyawan:integer;
9
10 begin
11     write('Masukan jumlah karyawan: ');readln(jml_karyawan);
12     write('Masukan gaji pokok      : ');readln(gaji_pokok);
13     pajak:=0.1*gaji_pokok;
14     tunjangan:=0.2*gaji_pokok;
15     gaji:=gaji_pokok+tunjangan-pajak;
16     jml_gaji:=gaji*jml_karyawan;
17     clrscr();{untuk membersihkan layar}
18     writeln('Pajak perorang      = Rp. ',pajak:0:2);
19     writeln('Tunjangan perorang = Rp. ',tunjangan:0:2);
20     writeln('Gaji ',jml_karyawan,' orang = Rp. ',jml_gaji:0:2);
21     writeln();
22     write('Tekan sembarang tombol untuk menutup...');
23     readkey();
24 end.
```



Collection of Exercises

Exercises of Sequential Search



Exercise 1

Create the algorithm and pascal code to:

- Around and area for 4 2-dimensional space
- Around and area for 3 3-dimensional space.

Exercise 2

Create the algorithm and pascal code to show curriculum vitae in paragraph style.

THANK YOU

GRACIAS

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