

STRUKTUR PERULANGAN

While – Do (Lanjutan)

Temu 9

Contoh 1#

Buatlah Algoritma untuk menghasilkan output dibawah ini :

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

Dengan pengulangan while-do

Program contoh1#

Deklarasi

a, b : integer

Algoritma

a = 1

while a <= 5 do

 b = 1

 while b <= a do

 write(b, ' ')

 b = b + 1

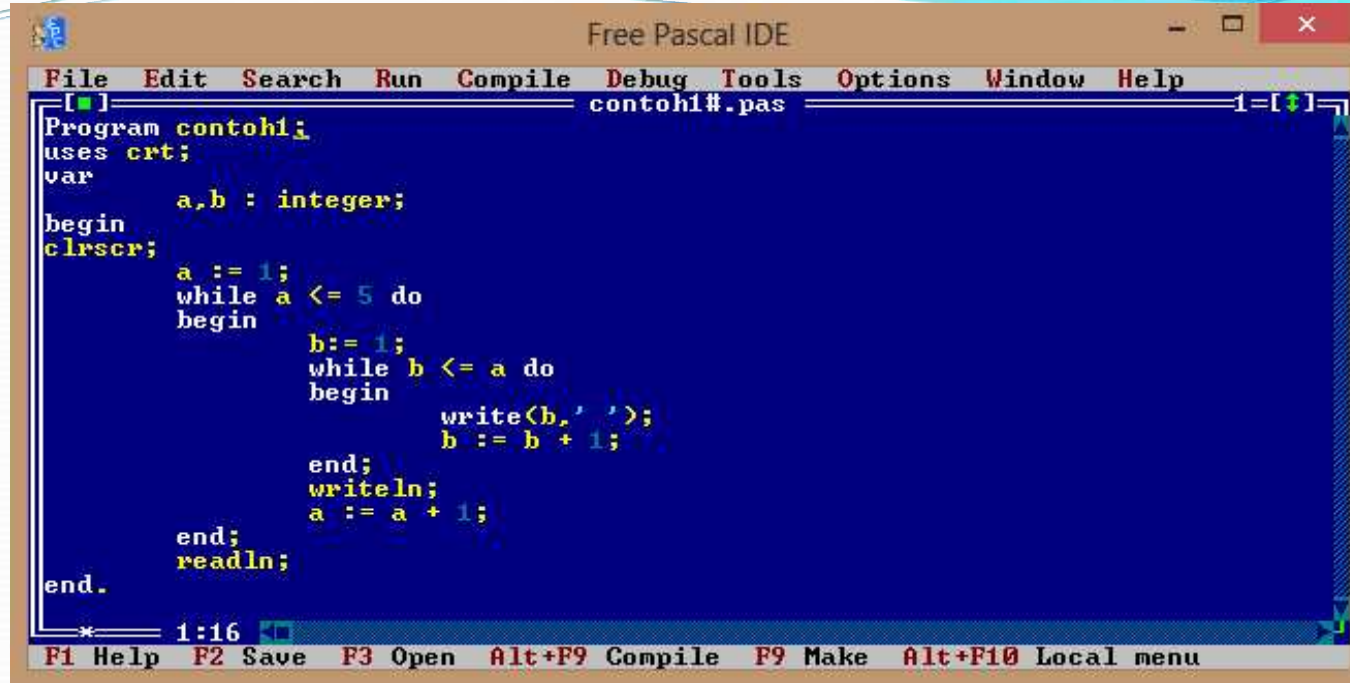
 endwhile

 writeln

 a = a + 1

endwhile

End Algoritma



The image shows a screenshot of the Free Pascal IDE window. The title bar reads "Free Pascal IDE". The menu bar includes "File", "Edit", "Search", "Run", "Compile", "Debug", "Tools", "Options", "Window", and "Help". The main editor area displays the following Pascal code:

```
contoh1#.pas 1=1
Program contoh1;
uses crt;
var
    a,b : integer;
begin
    clrscr;
    a := 1;
    while a <= 5 do
    begin
        b:= 1;
        while b <= a do
        begin
            write(b,' ');
            b := b + 1;
        end;
        writeln;
        a := a + 1;
    end;
    readln;
end.
```

The status bar at the bottom shows the cursor position "1:16" and a list of function key shortcuts: "F1 Help", "F2 Save", "F3 Open", "Alt+F9 Compile", "F9 Make", and "Alt+F10 Local menu".



The image shows a screenshot of the Free Pascal IDE window displaying the output of the program. The title bar reads "Free Pascal IDE". The output area shows the following text:

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

Contoh 2#

Buatlah Algoritma untuk menghasilkan output dibawah ini :

```
*  
  
* *  
  
* * *  
  
* * * *  
  
* * * * *
```

Dengan pengulangan while-do



Program contoh2#

Deklarasi

a, b : integer

Algoritma

a = 1

while a <= 5 do

 b = 1

 while b <= a do

 write('*:3)

 b = b + 1

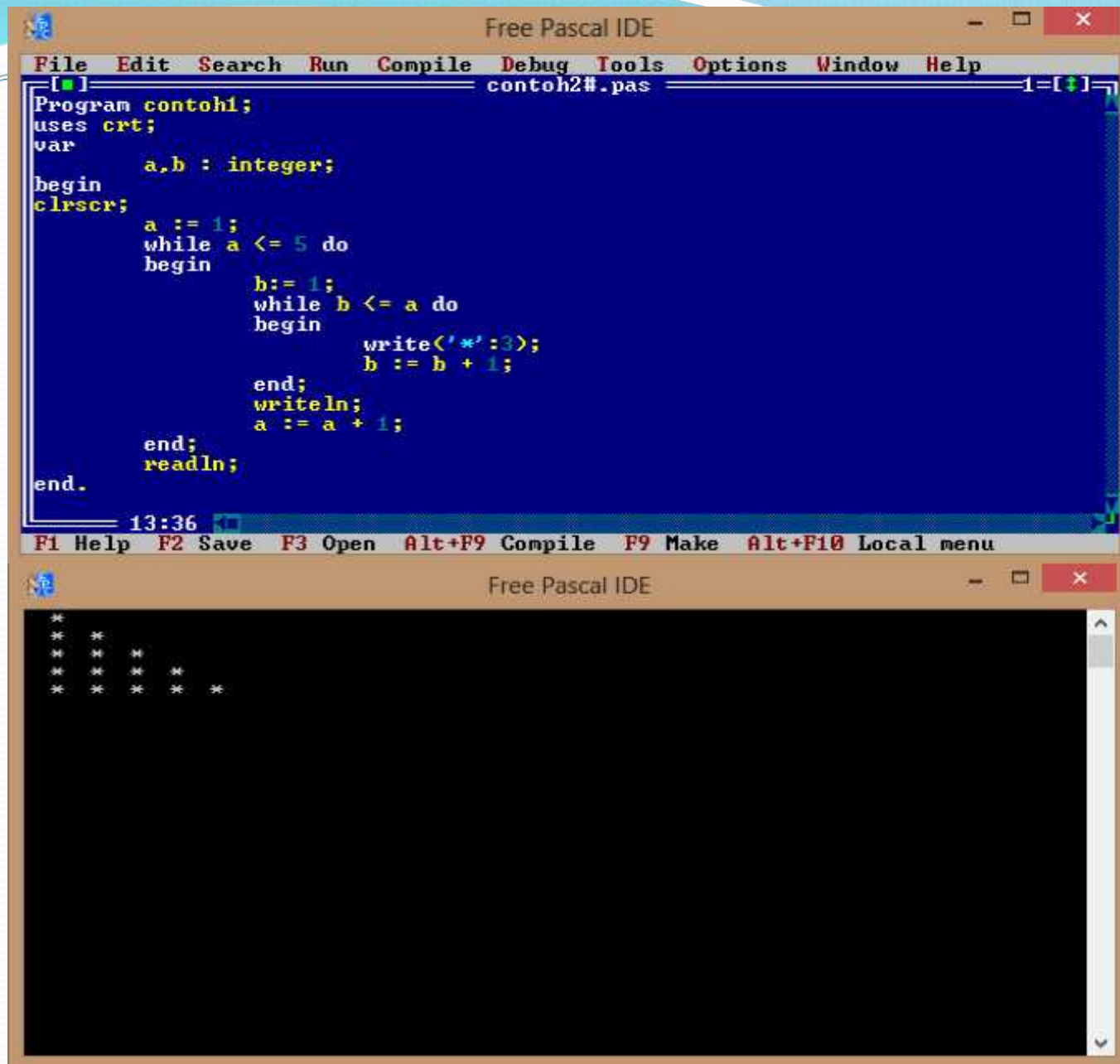
 endwhile

 writeln

 a = a + 1

endwhile

End Algoritma



Contoh 3#

Buatlah Algoritma untuk menghasilkan output dibawah ini :

1 1 1 1 1

2 2 2 2 2

3 3 3 3 3

4 4 4 4 4

5 5 5 5 5

Dengan pengulangan while-do

Program contoh3#

Deklarasi

a,b : integer

Algoritma

a 1

while a <= 5 do

 b 1

 while b <= 5 do

 write(a, ' ')

 b b + 1

 endwhile

 writeln

 a a + 1

endwhile

End Algoritma

```
Program contoh3;
uses crt;
var
  a,b : integer;
begin
  clrscr;
  a := 1;
  while a <= 5 do
  begin
    b := 1;
    while b <= 5 do
    begin
      write(a,' ');
      b := b + 1;
    end;
    writeln;
    a := a_+ 1;
  end;
  readln;
end.
```

```
1 1 1 1 1
2 2 2 2 2
3 3 3 3 3
4 4 4 4 4
5 5 5 5 5
```