DASAR PEMROGRAMAN

1. Andy loved to eat SilverQueen chocolate. One day, SilverQueen chocolate manufacturer hold a free chocolate promo by trade two empty packs of SilverQueen chocolate. If Andi has N pieces of SilverQueen chocolate, how many chocolates that Andi get from the exchange of his empty packs? Help Andi to make an algorithm for this problem !

   (Point 20)

2. Andi is studying about a function about **Exponentiation**. He knows that exponentiation corresponds to **repeated multiplication.** If Andi gives two inputs, the numbers A and N, help Andi to make an algorithm from exponentiation function where A and N are the list of parameters ! And make too the algorithm of Main Program that will call the exponentiation function !

   Function Pangkat (A : Integer, N : Integer) ->integer

   /* Fungsi menghitung jumlah berapa A dipangkat dengan N * /

   (Point 20)

3. Andi and Ando are twins. They always compete to get the mark 100 in each exam of each courses. But Ando is weak in basic programming course. Andi promises to Ando, if Ando get 100 in basic programming final exam, then Andi will give all his savings to Ando, but if Andi get 100 then Ando must give 50% of his savings to Andi . If both get 100, or both don't get 100, then the savings are not changed. Help Andi to make an algorithm of Savings Procedure for that problem ! Make the algorithm of Main Program that will call the Savings Procedure with the specifications below :

   Procedure Tabungan (input NilaiX ; integer, input/ output X:real, Input NilaiY : integer, input/output Y : real);

   /* IS : NilaiX, NilaiY, X dan Y yang telah teredefenisi

   ***/ FS : sesuai dengan kondisi pada soal yang ada**

   (Point 20)

4. In a research to know the interest of students about programming in Fakultas Ilmu Komputer UDINUS, Budi find ten data samples about value of interest that varies for each students : 35,32,19,57,65,89,67,65,58,90. Budi wants to **calculate the amount of number** that have a **negative differences**, for examples : 19-57=-38, 57-65=-8, 65-89=-24, and 58-90=-32, so there are four numbers that have negative differences (-38,-8,-24,-32). So you have to find negative differences by substract number(i) and number(i+1). Help Budi to make a program that receive 10 numbers input then calculate them with the function that result of a row of numbers and the amount of numbers that have negative differences. Numbers input are ten times that typed by keyboard one number per row. Program output is two rows. Row 1 view the numbers inputted and row 2 is amount of number with negative differences. The spesification of procedure and function is :

   Procedure Cetak (DTATA :array [1..10] of integer, N ; Integer) ;

   / *

   Procedure mencetak data dari array DATA sebesar N dengan format X_1 X_2 X_3....X_n dimana X_i adalah bilangan yang tercetak di layar dengan spasi

   */

   Function   HitNegatif (DATA : array [1...10] of Integer, N : Integer) -> Integer

   /*

   Fungsi menghitung jumlah selisih negatif dari (X_1- X_{i+1}....X_i-X_N)

ooo *Selamat Mengerjakan* ooo