**Praktikum Topik 12 (Praktikum Fungsi03) :**

Output program :

Menu Program



Input Data



Setelah diisi, dicetak dengan hasil :



Tambahkan kode program berikut, sehingga semua isian dapat diinputkan !

Kode Program :

 #include <iostream.h>

 #include <conio.h>

 #include <stdio.h>

 // membuat variabel struct...............................

 struct spegawai

 {

 int nip;

 char nama[30];

 char bagian[15];

 int anak;

 int gaji;

 };

 //mendefinisikan var. pegawai dengan struct spegawai....

 spegawai pegawai[10];

 //var data....

 int indexdata = 0;

 int klm;

 int brs;

 int klmisi = 38;

 char isiket[30];

 // fungsi cetak garis........................

 void garis()

 {

 cout << "===============================" << endl;

 }

 // fungsi cetak judul........................

 void cetakTampilan()

 {

 clrscr();

 klm = 20;

 brs = 3;

 gotoxy(klm, brs++);cout << "Isi Data Pegawai" << endl;

 gotoxy(klm, brs++);garis();

 gotoxy(klm, brs++); cout << "1. N I P : ........ ";

 gotoxy(klm, brs++); cout << "2. Nama : ......................... ";

 gotoxy(klm, brs++); cout << "3. Bagian : ............... ";

 gotoxy(klm, brs++); cout << "4. Anak : ... ";

 gotoxy(klm, brs++); cout << "5. Gaji : .......... ";

 gotoxy(klm, brs+=3); cout << "Sudah benar [Enter] : ";

 }

 //cetak keterangan.......................

 void ketisi()

 {

 gotoxy(klm, 20); cout << " ";

 gotoxy(klm, 20); cout << isiket;

 }

 //isi nip.......................

 void isiNip()

 {

 strcpy(isiket,"Maukkan nip 9000 s/d 99999");

 ketisi();

 brs = 5;

 gotoxy(klmisi, brs); cout << "........ ";

 gotoxy(klmisi, brs); cin >> pegawai[indexdata].nip;

 if ((pegawai[indexdata].nip < 9000) || (pegawai[indexdata].nip > 99999))

 isiNip();

 }

 //isi nama.......................

 void isiNama()

 {

 strcpy(isiket,"Maukkan nama min 5 charakter !");

 ketisi();

 brs = 6;

 gotoxy(klmisi, brs); cout << "......................... ";

 gotoxy(klmisi, brs); gets(pegawai[indexdata].nama);

 //mmengecek jumlah karakter nama.....

 int jumlah=0;

 for (int x=0;pegawai[indexdata].nama[x];x++)

 jumlah++;

 //jika karakter nama kurang dari 5 huruf isi lagi

 if (jumlah < 5)

 isiNama();

 }

 //isi bagian, anak dan gaji buat sendiri .......................

 void isiBagian()

 {

 //buat sendiri ya.....

 }

 //cetak data............................................

 void cetakData()

 {

 int no;

 int jmldata = indexdata;

 clrscr();

 cout << "Data pegawai " << endl;

 cout << "====================================" << endl;

 cout << " No Nip Nama " << endl;

 cout << "====================================" << endl;

 for (int ndata=0; ndata<jmldata; ndata++)

 {

 no = ndata + 1;

 cout << " " << no << "\t";

 cout << pegawai[ndata].nip << "\t";

 cout << pegawai[ndata].nama << "\t";

 cout << "dan seterusnya" << "\t";

 cout << endl;

 }

 cout << "====================================" << endl;

 getch();

 }

 //menu program............................................

 void menuNIM()

 {

 clrscr();

 klm = 20;

 brs = 5;

 gotoxy(klm, brs++);cout << "Menu Pilhan :";

 gotoxy(klm, brs++);cout << "==========================";

 gotoxy(klm, brs++);cout << "1. Isi Data";

 gotoxy(klm, brs++);cout << "2. Cari Data";

 gotoxy(klm, brs++);cout << "3. Sorting Buble Sort";

 gotoxy(klm, brs++);cout << "4. Cetak Data";

 gotoxy(klm, brs++);cout << "0. Selesai";

 brs += 2;

 gotoxy(klm, brs++);cout << "Pilih [0 s/d 4] : ";

 }

 //fungsi Isi Data...........................................

 void isiData()

 {

 cetakTampilan();

 //isi data........................

 isiNip();

 isiNama();

 //untuk isian yg lain tambahkan sendiri ya.......

 //lokasi index ditambah satu......

 //setelah simpan data.............

 indexdata++;

 gotoxy(44, 13); getche();

 }

 //fungsi cari Data....................................

 //menggunakan protiping function......................

 void cariData();

 //detail isi fungsi ditaruh setelah main()............

 //program utama.......................................

 void main()

 {

 // membuat variabel lokal............................

 int pilih;

 while (true)

 {

 menuNIM();

 gotoxy(40, 14); cin >> pilih;

 switch (pilih)

 {

 case 1:

 isiData();

 break;

 case 2:

 cariData();

 break;

 case 3:

 cariData();

 break;

 case 4:

 cetakData();

 break;

 default :

 break;

 } //tutup switch.............

 if (pilih==0)

 break;

 } //tutup while................

 } //tutup main......................

 //menggunakan teknik prototyping function..................

 //fungsi Cari Data...........................................

 void cariData()

 {

 cetakTampilan();

 //isikan nip yg dicari........................

 int xcari;

 gotoxy(klmisi, 5); cin >> xcari;

 //cari data.......................

 int c = 0;

 int xdata = indexdata;

 while ( c < xdata)

 {

 if (xcari == pegawai[c].nip)

 {

 //cetak data.....................

 klm = 20;

 brs = 3;

 gotoxy(klm, brs++);cout << "Data Pegawai Ditemukan " << endl;

 gotoxy(klm, brs++);garis();

 gotoxy(klm, brs++); cout << "1. N I P : " << pegawai[c].nip;

 gotoxy(klm, brs++); cout << "2. Nama : " << pegawai[c].nama;

 brs += 3;

 gotoxy(klm, brs+=3);

 break;

 }

 c++;

 }

 if (c == xdata)

 {

 //data tidak ditemukan.................

 gotoxy(klm, 13);

 cout << "Data Tidak Ditemukan !";

 }

 getche();

 } //tutup cari data...............................