**PROGRAMMING ASSIGNMENT PART 1**

TABLE OF VARIABES AND CONSTANTS

|  |  |  |
| --- | --- | --- |
| **Constant** | **Integers** | **double** |
| itcase = 100; | undertreat | pdeath |
| itdeath= 2; | nlocal | precover |
| itrec = 15; | nimport | ptreat |
| iundertreat = 15; | ndeath |  |
| yncase = 7; | nrec |  |
|  | totalcase |  |
|  | totaldeath |  |
|  | totalrec |  |

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START

STOP

Display current’s day Covid-19 data.

ptreat = roundf(undertreat \* 100) / totalcase;

precover = roundf(totalrec \* 100) / totalcase;

pdeath = roundf(totaldeath \* 100) / totalcase;

totalrec = nrec + itrec;

totaldeath = ndeath + itdeath;

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totalcase = nlocal + nimport + itcase;

undertreat = totalcase - totaldeath - totalrec

Read nlocal, nimport, ndeath and nrec.

Display Previous day Covind-19 data.

Declare variables undertreat, nlocal, nimport, ndeath, nrec, totalcase, totaldeath, totalrec, pdeath, precover, ptreat

Declare constants itcase, itdeath, itrec, iundertreat, yncase, prevpdeath, prevprecover, prevptreat.

CODE

#include <stdlib.h> //library

#include <stdio.h>

#include <math.h>

#pragma warning (disable:4996)

void main() {

// Variables

const int itcase = 100, itdeath = 2, itrec = 10, iundertreat = 88, yncase = 9;

const double prevpdeath = 2, prevprecover = 10, prevptreat = 88;

int undertreat, nlocal, nimport, ndeath, nrec;

int totalcase, totaldeath, totalrec;

double pdeath, precover, ptreat;

printf("----------------------------------------------COVID-19 TRACKER-------------------------------------------------------\n\n\n");

printf("Yesterday's Totals - (Day 8) :\n");

printf("-------------------------------------------------------------------------------------------------\n");

printf("| Yesterday's Cases | Total Cases || Total Deaths | Total Recovered | Under treatment |\n");

printf("-------------------------------------------------------------------------------------------------\n");

printf("|%11d |%9d ||%8d |%11d | %6d |\n", yncase, itcase, itdeath, itrec, iundertreat);

printf("-------------------------------------------------------------------------------------------------\n");

printf("| |%10.2lf%% | %11.2lf%% | %10.2lf%% |\n", prevpdeath, prevprecover, prevptreat);

printf("-------------------------------------------------------------------------------------------------\n\n");

printf("Day 10\n");

printf("========\n\n");

// Input

printf("Please enter today's data :\n");

printf("\t\tNumber of New Local Cases : ");

scanf("%d", &nlocal);

printf("\t\tNumber of New Import Cases : ");

scanf("%d", &nimport);

printf("\t\tNumber of deaths : ");

scanf("%d", &ndeath);

printf("\t\tNumber recovered : ");

scanf("%d", &nrec);

printf("\n");

// Process

totalcase = nlocal + nimport + itcase;

totaldeath = ndeath + itdeath;

totalrec = nrec + itrec;

undertreat = totalcase - totaldeath - totalrec;

pdeath = roundf(totaldeath \* 100) / totalcase;

precover = roundf(totalrec \* 100) / totalcase;

ptreat = roundf(undertreat \* 100) / totalcase;

// Daily Summary Report Table

printf("+ + + + + + + + + Daily Summary Report + + + + + + + + \n");

printf("--------------------------------------------------------------------------------------------------------------------\n");

printf("| New Local Cases | New Imported Cases | Total Cases | Total Death | Total Recovered | Under Treatment |\n");

printf("--------------------------------------------------------------------------------------------------------------------\n");

printf("|%9d |%12d |%10d |%8d |%11d | %6d |\n", nlocal, nimport, totalcase, totaldeath, totalrec, undertreat);

printf("--------------------------------------------------------------------------------------------------------------------\n");

printf("| |%10.2lf%% | \t%8.2lf%% | %10.2lf%% |\n", pdeath, precover, ptreat);

printf("--------------------------------------------------------------------------------------------------------------------\n\n");

printf("-------------------------------------------------- END OF DAY 10----------------------------------------------------\n\n");

system("pause");

}

**SCREENSHOT OF RESULT**



