**יובל רשמן דף תרגילים מספר 4**

**Ex1:**

#pragma warning(disable:4996)

#include <stdio.h>

int main() {

int first, second, third, forth; //first, second, third, forth, part

for (first = 1; first <= 100; first++) {

printf("%d,", first);

}

printf("\nfirst part done \n");

for (second = 100; second >= 1; second--) {

printf("%d,", second);

}

printf("\nsecond part done \n");

printf("enter number: \n");

scanf(" %d", &third);

for (; third >= 1; third--) {

printf("%d,", third);

}

printf("\n done \n");

printf("third part done \n");

for (forth = 1; forth <= 100; forth++) {

if (forth % 4 == 0) {

printf("%d,", forth);

}

}

printf("\n forth part done \n");

return 0;

}

**Ex2:**

#pragma warning(disable:4996)

#include <stdio.h>

int main() {

int employl, bottles;

for (employl = 1; employl <= 26; employl++) {

printf("enter employ %d bottle number \n", employl);

scanf(" %d", &bottles);

if (bottles > 20) {

bottles = 20;

}

else if (bottles < 5) {

bottles = 5;

}

printf("employ %d got: %d bottles \n \n", employl, bottles);

}

return 0;

}

**Ex3:**

#pragma warning(disable:4996)

#include <stdio.h>

int main() {

int n, number;

printf("enter how much numbers you are going to give: \n");

scanf(" %d", &n);

for (; n; n--) {

printf("enter number: \n");

scanf(" %d", &number);

if (!(number % 2)) {

printf("%d \n", number);

}

}

return 0;

}

**Ex4:**

#pragma warning(disable:4996)

#include <stdio.h>

int main() {

int n, index, number, first;

printf("enter how much numbers you are going to give: \n");

scanf(" %d", &n);

for (index = 0; index < n; index++) {

printf("enter number: \n");

if (!index) {

scanf(" %d", &first);

}

else {

scanf(" %d", &number);

if (number - first) {

printf("%d \n", number);

}

}

}

return 0;

}

**Ex5:**

#pragma warning(disable:4996)

#include <stdio.h>

int main() {

int currentStudentNumber, testIndex, avg, grade, oneHundredCounter = 0;

char name[30]; //create string that can hold max 30 letters

for (currentStudentNumber = 0; currentStudentNumber < 30; currentStudentNumber++) { //checking all the 30 students

avg = 0; // restart average

printf("enter studunt name: \n");

scanf(" %s", &name);

for (testIndex = 1; testIndex <= 3; testIndex++) { //checking all 3 tests

printf("enter test %d grade: \n", testIndex);

scanf(" %d", &grade);

avg += grade;

}

avg /= 3;

if (grade > 85) { // check the last grade (3hd grade)

avg += 5;

if (avg > 100) { //if final grade bigger then 100 we need to set it to 100

oneHundredCounter++;

avg = 100;

}

else if (grade == 100) {

oneHundredCounter++;

}

}

printf("Student: %s , Final grade is: %d \n", name, avg);

}

printf("the number of students who got 100 is: %d", oneHundredCounter); // print how many students got 100

return 0;

}

**Ex6:**

#pragma warning(disable:4996)

#include <stdio.h>

int main() {

char letter = ' ';

while (letter < 'a' || letter > 'z')

{

printf("enter small leter: \n");

scanf(" %c", &letter);

}

printf("your letter is %c: \n", letter);

return 0;

}

**Ex7 + Ex8:**

#pragma warning(disable:4996)

#include <stdio.h>

int main() {

int guessNumber , givenNumber, remainTry, stillWantToPlay = 'y';

while (stillWantToPlay == 'y') // check if you still want to play

{

remainTry = 2; //restart remain tries

printf("player 1: enter number: \n");

scanf(" %d", &givenNumber);

printf("player 2: guess number: \n");

scanf(" %d", &guessNumber);

while (remainTry > 0 && guessNumber != givenNumber) { //check if you succseed or if you still can guess

printf("you failed :( try again %d tries left \n", remainTry);

printf("player 2: guess number: \n");

scanf(" %d", &guessNumber);

remainTry--;

}

if (remainTry == 0) { //if you fail remainTry will be 0;

printf("game over\n");

}

else {

printf("good joob :) \n");

}

printf("do you want to play again y/n \n");

scanf(" %c", &stillWantToPlay);

}

return 0;

}

**Ex9:**

#pragma warning(disable:4996)

#include <stdio.h>

#include <string.h>

int main() {

char name[30], id[9];

int grade, aboveNinetyFive = 0;

printf("enter student id: \n");

scanf(" %s", &id);

while (strcmp(id, "-1")) {

printf("enter student name: \n");

scanf(" %s", &name);

printf("enter student grade: \n");

scanf(" %d", &grade);

printf("Id: %s, Grade: %d \n\n", id, grade);

if (grade > 95) {

aboveNinetyFive++;

}

printf("enter student id: \n");

scanf(" %s", &id);

}

printf("%d students got grade above 95", aboveNinetyFive);

return 0;

}

**Ex10:**

#pragma warning(disable:4996)

#include <stdio.h>

#include <string.h>

int main() {

int totalPrice, customersCount = 0;

char name[30];

printf("enter your name: \n");

scanf(" %s", &name);

while (strcmp(name, "-1")) {

customersCount++;

printf("enter how many orders you took: \n");

scanf(" %d", &totalPrice);

totalPrice \*= 9;

printf("%s need to pay %d$ \n\n", name, totalPrice);

printf("enter your name: \n");

scanf(" %s", &name);

}

printf("%d people been in the restaurant today.", customersCount);

return 0;

}

**Ex11:**

#pragma warning(disable:4996)

#include <stdio.h>

int main() {

int row, column;

for ( row = 1; row <= 10; row++)

{

for (column = 1; column <= 10; column++) {

printf("%d,", row \* column);

}

printf("\n");

}

return 0;

}

**Ex12:**

#pragma warning(disable:4996)

#include <stdio.h>

int main() {

int numberOfLines, characterToPrint;

for (numberOfLines = 3; numberOfLines > 0; numberOfLines--) {

for (characterToPrint = numberOfLines; characterToPrint > 0; characterToPrint--) {

printf("\*");

}

printf("\n");

}

return 0;

}