Comp 1 - Computer Fundamentals and Programming

Turbo C; P.S. - All of the programs uses the common functions:

printf, scanf, clrscr, getch.

printf(); - printing

scanf(); - scan a data type

%d - integer

%ld - long integer

%f - float, 4.4

%lf - double, 44.42424242

%c - char

%s - string

clrscr(); - clearing the screen

getch(); - pausing the screen or get character or scanning char

(?) - Unfinished or uncertain programs.

/\* (0) RNO Program

(void, switching functions) <Comp 1/Mathematics> \*/

/\* (1) Hello Turbo C!

(printf function) <Comp 1> \*/

/\* (2) (x+y)=sum

(printf, scanf functions) <Comp1/MATH1>\*/

/\* (3) Determining ODD/EVEN number

(if-else if function) <Comp1/MATH1> \*/

/\* (4) Fibonacci Series

(for loop function) <Comp1/MATH1> \*/

/\* (5) Reservoir w/ intake pipes A & B;

Output: time to be filled \*

(if-else if, casting functions) <Comp1/MATH1> \*/

/\* (6) Input: 123

Output: 321

(printf, scanf functions) <Comp1> \*/

/\* (7) Determining the roots of a Quadratic Equation:

ax^2+bx+c=0

(infinite for loop, break, if-else if functions) <Comp1/MATH1> \*/

/\* (8) Add if Composite and Minus if Prime and output is the total

(for loop function) <Comp1> \*/

/\* (9) Determining if the date is valid/invalid

(switching function) <Comp1> \*/

/\* (10) Guess the number

(if-else if function) <Comp1> \*/

/\* (11) Solving the Area of a Circle

(printf, scanf functions) <Comp1/MATH0> \*/

/\* (12) Reversing mutiple numbers

(for loop function) <Comp1> \*/

/\* (13) Solving a problem in PHYS 1 with

the topic Newton's Law on Angular Motion

(printf, scanf functions) <Comp1/PHYS1> \*/

/\* (14) Tangent of a Number in rads.

(printf, scanf functions) <Comp1/MATH2> \*/

/\* (15) Number to Scientific Notation.

(if-else if function) <Comp1/CHEM1> \*/

/\* (16) Computer Hardware Components Definitions.

(strcpy, strcmp functions ) <Comp1/CpE211> \*/

/\* (17) Finding the largest decimal number and reverse it.

No: 3; Example: 12 123 3;

Output: 321 (for loop function) <Comp1/MATH1>\*/

/\* (18) Finding the Greatest Common Denominator of the numbers.

(for loop function) <Comp1/MATH1> \*/

/\* (19) Finding the Largest of the numbers and determine the Even.

(for loop function) <Comp1/MATH1> \*/

/\* (20) Determining every sum you inputed numbers if it is Prime or Not.

(nested-for loop function) <Comp1/MATH1> \*/

/\* (21) Inputed numbers press 0 to stop then sort the output.

(array, for loop functions) <Comp1> \*/

/\* (22) 'a' and 'b' for division a/b.

(printf, scanf functions) <Comp1/MATH1> \*/

/\* (23) Input float numbers then just get the whole part.

(array, for loop functions) <Comp1> \*/

/\* (24) 5 float inputs and their average.

(printf, scanf, casting functions) <Comp1/MATH1> \*/

/\* (25) Input a desire array and print what you inputed.

(array, nested-for loop functions) <Comp1> \*/

/\* (26) Decimal to Binary.

(array, while loop, for loop functions) <Comp1/Comptech3/CpE321> \*/

/\* (27) Input numbers, zero to terminate. Det min and max and there GCD.

(array, for loop functions) <Comp1/MATH1> \*/

/\* (28) Enter magic number 143, 143 means I love you.

(if-else function) <Comp1> \*/

/\* (29) Prime numbers.

(for loop, if-else functions) <Comp1/MATH1> \*/

/\* (30) Sorting numbers.

(void, do-while loop functions) <Comp1> \*/

/\* (31) Perimeters of various shapes.

(strcpy, strcmp, array functions) <Comp1/MATH0> \*/

/\* (32) Input numbers press zero to terminate,

determine the composite and the largest number.

Show the prime factorization of the largest

composite numbers

(for loop, nested-if,else-if, array functions) <Comp1/MATH1> \*/

/\* (33) Input numbers press zero to terminate,

show the prime numbers and its binary

(for loop, nested-for loop, array functions) <Comp1/MATH1> \*/

/\* (34) Reversing the whole number in float.

EX: 1234.33 4321.33

(for loop, nested-for loop, array functions) <Comp1/MATH1> \*/

/\* (35) Input numbers press zero to terminate,

Determine the largest odd number

(for loop, nested-for loop, array functions) <Comp1/MATH1> \*/

/\* (36) Inputs: 12.33 0

Out: 33.12

(for loop, nested-for loop, nested if, array functions) <Comp1/MATH1> \*/

/\* (37) Inputs: 12 4 55 55 0; Scan number: 2;

Out the 2 digit. Out: 12 55 55

(for loop, array functions) <Comp1/MATH1> \*/

/\* (38) Binary to Octal

(for loop, array functions) <Comp1/Comptech3/CpE321> \*/

/\* (39) Determine the input if it is odd or even

(while loop, if else-if functions) <Comp1/MATH1> \*/

/\* (40) A program that sorts a list of integer numbers. The list is

terminated with e at the end.

NOTE: The array is limited to the settings in SIZE constant.

(void, do-while loop functions) <Comp1/MATH1> \*/

/\* (41) Input 3 numbers. Determine the SUM, QUOTIENT,

LARGEST and SMALLEST.

(if functions) <Comp1/MATH1> \*/

/\* (42) Input numbers. Determine how many it repeats.

EX. 1 1 1 2 2 2

Output: 1 - 3; 2 - 3

(nested for loop function) <Comp1/MATH1> \*/

/\* (43) Input numbers: 3

Input 3 digits: 1 2 3

Sum of the Powered Values: (1^1)+(2^2)+(3^3)=32

(array, for loop functions) <Comp1/MATH1> \*/

/\* (44) Sum of all the datas based on 2D array

(2D array, nested for loop functions) <Comp1/MATH1> \*/

/\* (45) Converting number to words.

Ex: 45 - fourty five

(switching, for loop functions) <Comp1/MATH1> \*/

/\* (46) Enter How many inputs: 9

Enter how many digits: 8

Input(s): 1 2 3 4 5.5 6 7 8 9

Out: 1 2 3 4 5.5 6 7 8, only the 8 inputs display (?)

(if-for loop,nested for loop functions) <Comp1/MATH1> \*/

/\* (47) Enter # of sets: 3

Element (1): 1 2 3 0

Element (2): 1 2 4 0

Element (3): 4 5 6 0

A union B (Ascending Prime Numbers)+ {1 2 3 4 5}

(?)

(2D array, nested for loop functions) <Comp1/MATH1> \*/

/\* (48) Input string and arrange it alphabetical order

(array, nested for loop functions) <Comp1/Engl1> \*/

/\* (49) VACANT.

(array, nested for loop functions) <Comp1/Engl1> \*/

/\* (50) ANAGRAM: If the 1st input is anagram in the

2nd input the output of the string will be reverse.

(array, while loop, strtok, strrev functions) <Comp1/Engl1> \*/

/\* (51) EBAN numbers:

Ex: 45 - fourty fiv(e)

Out: EBAN

(switching, for loop, strcpy, strcat functions) <Comp1/MATH1> \*/

/\* (52) Decimal to Binary

(for loop function) <Comp1/Comptech3/CpE321> \*/

/\* (53) Sorting inputs

(array, nested for loop functions) <Comp1/MATH1> \*/

/\* (54) Palindrome or Not-Palindrome:

1001 - Palindrome

(array, for loop functions) <Comp1/MATH1> \*/

/\* (55) CAIPHERTEXT: Encrypt and Decrypt

(switching function) <Comp1/Engl1> \*/

/\* (56) Enter inputs, determine if it is

Odd or Even.

(array, for loop functions) <Comp1/MATH1> \*/

/\* (57) Determine the Happy Numbers in given range.

(infinite for loop functions) <Comp1/MATH1> \*/

/\* (58) Printing CHAPPIE when you input 69

(if, printf functions) <Comp1> \*/

/\* (59) Wasteful Number.

If the prime factors of a number is greater

than its digit.

(for loop functions) <Comp1/MATH1> \*/

/\* (60) Enter inputs, then display the

prime and composite.

(void, struct, array functions) <Comp1/MATH1> \*/

/\* (61) Determine the Happy Numbers and its

Prime Factors

(nested if, infinite for loop functions) <Comp1/MATH1> \*/

/\* (62) Determine if it is Happy and Prime number.

(nested if, infinite for loop functions) <Comp1/MATH1> \*/

/\* (63) CAIPHERTEXT: Encrypt and Decrypt

(switching function) <Comp1/Engl1> \*/

/\* (64) Splitting String.

Example: Hello World

Out: Hello

World

(strtok, for loop functions) <Comp1/Engl1> \*/

/\* (65) Enter inputs, then display the

prime and composite.

(array, for loop functions) <Comp1/MATH1> \*/

/\* (66) Reversing number by using its remainder

(for loop function) <Comp1/MATH1> \*/

/\* (67) Enter inputs, display:

EVEN, SUM of Even Numbers, ODD, PRIME, COMPOSITE.

(array, nested for loop function) <Comp1/MATH1> \*/

/\* (68) Largest number of 3 inputs.

(if else function) <Comp1/MATH1> \*/

/\* (69) Enter 2 numbers, determine its GCD.

Convert GCD to binary.

(if else function) <Comp1/MATH1/CompTech3/CpE321> \*/

/\* (70) Printing PYRAMID.

(textcolor, for loop functions) <Comp1/MATH0> \*/

/\* (71) Computer Shutdown.

(system function) <Comp1/CpE211> \*/

/\* (72) Enter username (only lower case) then if

it lower case go directly to password

(strlwr, strlen, for loop functions) <Comp1> \*/

/\* (73) Enter string then display the word

depending on the given position

(2D array, for loop functions) <Comp1/Engl1> \*/

/\* (74) If what word in 1st input is in 2nd input

display it.

Input1: Hello World

Input2: Wonderful Hello

Out: Hello

(long check(char \*, char \*), strtok,

while loop, for loop functions) <Comp1/Engl1> \*/

/\* (75) Printing the value in x and y.

(void, struct functions) <Comp1/MATH1> \*/

/\* (76) VACANT.

(array, nested for loop functions) <Comp1/Engl1> \*/

/\* (77) Look and say. 2-12-1112

(malloc, realloc, sprintf, array pointers functions) <Comp1/MATH1> \*/