TOPIC: ASSIGNMENT (LAB 04 , EXERCISE 01)

Group member

JEGGEAN (A19EC0059) (QUESTION 11-16)

RAGU (A190152) (QUESTION 7-10)

CHIA WEI HONG (A19EC0033) (QUESTION 1-6)

1.

i)Predefined funtions

\*you create the structure of the datatype by yourself

ii)Programme defined function

\*the structure of the datatype that already defined internally.

2.

i)pow(x,y) & sqrt(x)

ii)<cmath>

3.

The preprocessor examine the code before actual compliation.

4.type is double,2 parameter and both of them double.(pow)

Type is double,1 parameter and double(sqrt).

5.

Line 13 and 14 it power the value of int a and b by 2 and sqrt the total value of asqrt and bsqrt.

6.

4.1

Line 13:a

Line 15:(asqrt+bsqrt)

4.2

Line 13:input

Line 15:input

7.

Isalpha=check whether the input in alphabet

Isdigit= check whether the input in digit

Islower= check whether the input in lowercase alphabet

Usupper= check whether the input in upeercase alphabet

Isspace= check whether the input is a white space.

8.

a.pow(x,0.5)

b.cos(x)

c.sin(x)

d.pow(x,7.0)

e.(pow(x,3)+pow(x,7))/x

f.sqrt(fabs(a-b))

9.

a)

getAnInteger,calculateAverage,displayAverage

b)

int getAnInteger(void):

to get the input integer from user

float calculateAverage(int x,int y,int z):

To calculate the average x,y and z by summing the x,y,z and then divide by three.

Void displayAverage(float avg):

Display the message :The message of your 3 numbers is and then display the average.

c)

num1=getAnInteger(),num2=getAnInteger(),

num3=getAnInteger(),average=calculateAverage(num1,num2,num3),

displayAverage(average)

d.

i)header

ii)call

iii)call

iv)header

e.int main()

line 26

f.

line 7,15,20

10.

a.

function of prototype=to eliminate the need to place function definition before all calls to the function.

When=when you want to declare the function.

b.

the differences between the function prototype and function header is function protype have semicolon meanwhile the header does not have.

11.

a.const num1,num2,num3

b.

line 23 replace with

cout<<”(num1+num2+num3)/3=”<<displayAverage(average)

c.

because there is no parameter

12.

Your integer is :100

Your integer is now:300

Your integer is :100

End of Program

Reason: when an argument is passed into a parameter, only a copy of the argument is passed. So, the changes do not affect the original argument.

13.

a.

The statement in line 50 and 51

b.

return value:true

make the if statement true and display the message Congratulations…! You are excellent.

c.

else if (score>=80){

return ‘A’;}

else if (score>=70){

return ‘B’;}

else if (score>=60){

return ‘C’;}

else if (score>=50){

return ‘D’;}

else{

return ‘E’;}

d.

double point;

else if (score>=80){

point=4.0;}

else if (score>=70){

point=3.0;}

else if (score>=60){

point=2.0;}

else if (score>=50){

point=1.0;}

else{

point= 0.0;}

return point;

14a.

1x=5

2x=7

3x=5

4x=25

5x=1

6x=5

15a.

num is 5

num is 10

num is 6

num is 10

num is 7

num is 10

num is 8

num is 10

num is 9

num is 10

15b. The static variable are defined and initialized only the first time function is executed. While the local variable only exist while the function is executing. When the function terminates,the contents of local variables are lost.

16.

When used parameters, reference variables allow a function to access the parameter original argument. Changes to the parameter are also made to the argument.

a.yes

Because the parameter is still valid which is integer and one parameter only,

b.100

because the program will terminated at line 15.