GraphicsProgram is a tool to create applets

Getting the input of the user is done through readDouble [don’t need the remember b/c it’s on google]

readDouble is to read a double number from console

it also prints a message to the user

--> the message "h0"

make our message of type String (data type, arrays of characters) " "

concatenate strings by +

Concatenate strings and numbers

Always debug code before moving to the next line

Control Statements:

* If statement

If (CONDITION)

{

Instruction 🡪 executed if the condition is satisfied

}

Ex:

Int a = 5;

Int b = 4;

If (a<b) [if it is false, do nothing. If true, runs the instruction]

{

System.out.println(a);

Can be expanded with “else” or “else if”

Int a = 5;

Int b = 4;

If (a<b)

{

System.out.println(a);

}

else {

System.out.println(b);

}

**add as many as we want**

else if (CONDITION) {

cannot end with else if

* For loop

Sum 1 to 100

Int sum = 100;

For (INITIALIZATION); TERMINATION; INCREMENT

{

Instruction

}

Ex:

For (int i=100; i <= 100 ; i++)

{

[a OP= b ⬄ a = a OP b] OP 🡪+, -, \*, /

Sum += i;

}

System.out.println(“Sum =” +sum);

i++ is the same as i= i+ 1

++i [coming after i]

Vs

i++ [coming before i], give value first to the instruction then it will increase the value

instruction in java is performed left to right, unless there is a precedence issue [pemdas]

while loop

while (CONDITION)

{

Instructions

}

For loop and while loop is pretty much the same

Ex:

Int sum= 0;

Int i=1;

While(I <=100)

{

Sum += I;

I++;

}

Put increment in the body of the increment.

Java introduced the concept of objects

+ - \* /

* Functions
* f(x)= x^2

[student is treated as a data type

encapsulate some information]

public class student {

string name;

string major;

string faculty;

int age;

double GPA;

}

OBJECT: means example of classes

Class: definition

Ex:

Student

Age

Faculty

Gpa….

Right click; source; generate constructor using fields;

String 11 bytes, int 4 bytes, double 8 bytes

New is to allocate memory for that object

Cross out line on resize; applets are going to disappear

GOval ball=new GOval (0,400,60,60);

GOval is defined in acm

New 🡪 allocate memory from ram

GOval (x pos, y pos, x radius, y radius)

UNDERSTAND WHAT HAPPENS WHEN “GOval” is written. Know the meaning behind

Implement the code, change it a bit, comment the code. Use own size for ball

Try to write code first to learn then copy it.