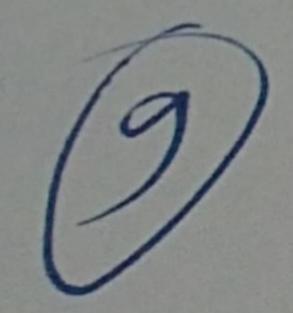
- 1- State/Write whether each of the following is True or False. (Every two wrongs will take (1 pt. each): away one right.)
 - a. talse Any C++ program that prints three lines of output must contain three output statements using cout.
 - 3. Pure C++ consider the variables numero and Numero to be identical.
 - c. Truce Static data members of a class have class scope.
 - d. Jake An array can store many different types of values.
 - e. Takke If y and z are declared as: int y, z; then I can write y = &z;
 - f. table. The name of an array is a pointer to the last element of the array.
 - g. La Class destructors can take arguments.
 - h. take A const member function of a class can modify const objects.
 - table Constructors cannot specify default arguments.
- j. Like A friend function of a class cannot access the protected members of the class.
- ok. There A subclass can access the private members of its parent class.
 - 1. The precedence of an operator cannot be changed by overloading.
 - m. tabelf the + operator is overloaded to work on arrays of integers, then the += operator will be automatically overloaded to work with arrays of integers.
- Operator overloading can be used to create new non-existing operators.
- Q. Truce When deriving a class from a public base class, all members of the base cl become public members of the derived class.



Find/circle the syntax error(s) in each of the following and correct it/them or explain how (1 pt for each corrected error) to correct it: a. int A2D[2] [2] $\{3, 4\}$; : N-A20[27[2] = 3 11,23,13,48 class hour { public: ~ hour (1:1/ destructor hour (int); (void ~hour (); private: int H=0;

c. Class easytricks! public: int increments () (const) return (+x;) -casytricks (void); private: int x: } Int macment X() const cannot return ++x; everytime called it has to nevenent x so Forst should so it is not comit. -> Ent indement X() & return ++x;3

3- What is the main benefit of using inheritance? I the base dans in the use of merber function of the base dans in the derived dans, which is the oftweet revolutions revolutions concept 4- What is the difference between a static variable and an automatic variable? (2pts) the Calls A static buildle Keeps value between fulction calls whereas an automatic variable is always the same whencalled again 5- Déclare x as an integer variable, initialize x to 10, declare y as a pointer to an integer, assign y the address of x, and then write a statement to print the content of x using the (2 pts) dereferencing operator. y = &x; cout << the content of x using the dereferency operator is Ke ty coal; 6- Define a class **person** with three public data members: first-name, last-name, and age. Their defaults values are: Mohamad, Ladan, and 35. Derive a class **student** from class **person**, the class **student** should have one public data member major. Overload the stream insertion operator << (cout) so that it will print the first-name, last-name, age, and major for any student object.

Write the class **person** and its subclass **student**, and a **driver program** that will instantiate an object of a class **student** intialized with your own data (your firstname, lastname, age, and major) <u>using the class constructor</u>, and print these data using the overloaded stream insertion operator <<

class person ?

Class person 2 Person (chattlebard chall-ladan, wt = 35); l'défault chan first-vane [[3]; chan last-vane [[5]; int age; person :: person (chan Ofirst and, chan Thasting, What old) first-aels=first; 11 ands at space last-aels=last; age = old;

-- or cam miscrition operator <<

Class pstudent: public person 2 pied ostream doperator (= (); student (char Ofirst, challest, int age, chartage)

person (chartfirst, chartlest. int age) skroligant) = maj; Stycles & Berator C (orthput) output << first-ae tt., '< clastace << ' o' << ag < ' < c major < edl'iturn output, 5

idude stades. To student s (Georges, Bali, 22, csc); cout << 3 1/ and of driver