**DELEGATES IN C# PROGRAMMING**

* **DELEGATE MEANING FROM GOOGLE:** A PERSON SENT OR AUTHORIZED TO REPRESENT OTHERS, IN PARTICULAR AN ELECTED REPRESENTATIVE SENT TO A CONFERENCE.
* DELEGATE IS A TYPE WHICH HOLDS A METHOD’S REFERENCE IN AN OBJECT.
* IT IS ALSO CALLED FUNCTION POINTER.
* DELEGATE IS OF REFERENCE TYPE.
* DELEGATE SIGNATURE SHOULD BE AS SAME AS THE METHOD SIGNATURE REFERENCING BY A DELEGATE.
* DELEGATE CAN POINT TO A PARAMETERIZED METHOD OR NON-PARAMTERIZED METHOD.
* DELAGATE HAS NO IMPLEMENTATION MEANS NO BODY WITH { }.
* WE CAN USE **INVOKE()** METHOD WITH DELEGATES.
* DELEGATES ARE USED TO ENCAPSULATE METHODS.
* IN THE .NET FRAMEWORK, A DELEGATE POINTS TO ONE OR MORE METHODS. ONCE YOU INSTANTIATE THE DELEGATE, THE CORRESPONDING METHODS INVOKE.
* DELEGATES ARE OBJECTS THAT CONTAIN REFERENCES TO METHODS THAT NEED TO BE INVOKED INSTEAD OF CONTAINING THE ACTUAL METHOD NAMES
* USING DELEGATES, YOU CAN CALL ANY METHOD, WHICH IS IDENTIFIED ONLY AT RUN-TIME.
* A DELEGATE IS LIKE HAVING A GENERAL METHOD NAME THAT POINTS TO VARIOUS METHODS AT DIFFERENT TIMES AND INVOKES THE REQUIRED METHOD AT RUN-TIME.
* IN C#, INVOKING A DELEGATE WILL EXECUTE THE REFERENCED METHOD AT RUN-TIME.
* TO ASSOCIATE A DELEGATE WITH A PARTICULAR METHOD, THE METHOD MUST HAVE THE SAME RETURN TYPE AND PARAMETER TYPE AS THAT OF THE DELEGATE.