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PRACTICE OF NONGRAPHICAL OBJECT XRECORD IN ENGINEERING DESIGN.

Graphical objects, also known as entities, are the visible objects (lines, circles, polygons, ellipses, and so forth) that make up a drawing. To create these objects, use the appropriate add method. To modify or query these objects, use the methods or properties of the object itself. Each graphical object has methods that allow an application to perform most of the AutoCAD editing commands such as copy, move, offset, rotate, mirror, and so forth.

Nongraphical objects are the invisible (informational) objects that are part of a drawing, such as layers, linetypes, dimstyles, selectionsets, xrecord and so forth. To create these objects, use the add method of the parent collection object. To modify or query these objects, use the methods or properties of the object itself. Each nongraphical object has methods and properties specific to its purpose; all have methods for setting and retrieving extended data, and deleting themselves.

The AcadDictionary object represents a container object for storing and retrieving objects, with associated string keywords by which they are referenced. A dictionary can contain any type of object, including other dictionaries. You can create new dictionaries, add entries to an existing dictionary, and get the keyword for a given object or the object for a given keyword. You can change the object associated with a given keyword or rename the keyword for a given object. However, it doesn't perform type checking of entries.

The AcadXRecord object is used to store and manage arbitrary data. Xrecords are similar in concept to xdata but are not limited by size or order. They use standard AutoCAD group codes, the values of which are all below 1000, which means in addition to all the normally used data types, xrecords are capable of storing object ids, allowing ownership of many other objects. Xrecord objects are saved with the drawing and can be directly accessed by other Visual Basic and LISP programs. Xrecords are created using the add of the dictionary

object and accessed programmatically through the item method of the dictionary object. The only basic operations that can be performed on xrecords are add, get, and delete. There is no means to update (modify) an xrecord other than to delete and re-create it.

Let's draw a circles (Figure 1) and their circumferences values write to xrecord object. Xrecord information are presented in Figure 2. Next procedure founded sum of numeral information in the xrecord object. Result presented in Figure 3.
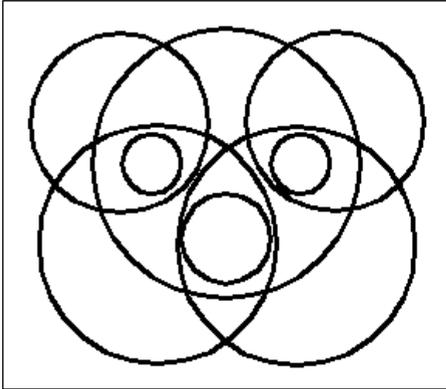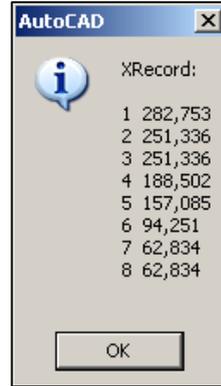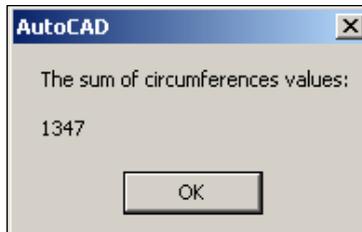

Fig 1. Drawing

Fig 2. Xrecord information

Fig 3. Sum of numeral information