

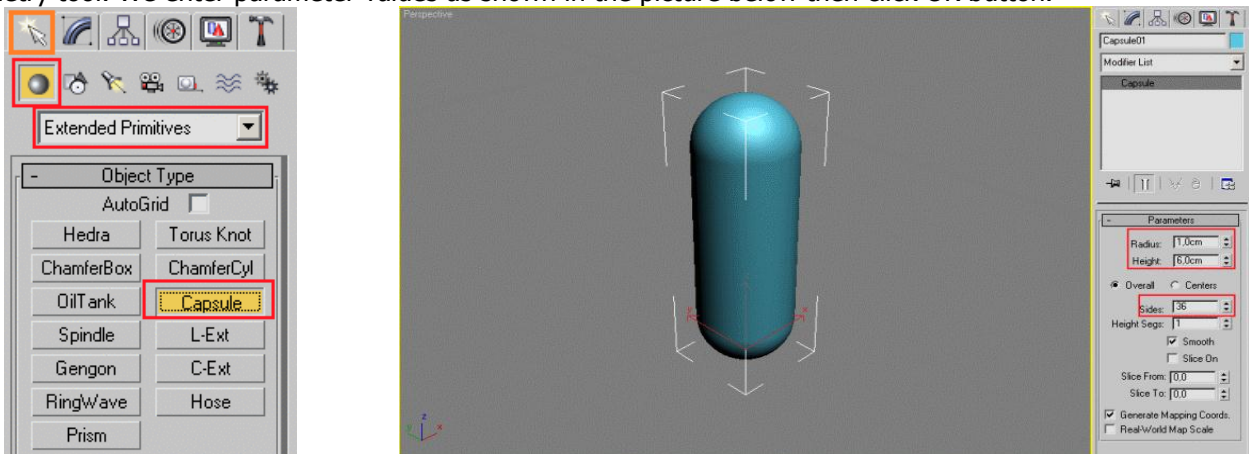
PRACTICAL STATGES OF CREATING USB FLASH DRIVE WITH AUTODESK 3DS MAX 2009 FOR 3D MODELLING COURSE

X.D.Yuldashev¹,
O.M.Raxmonov²

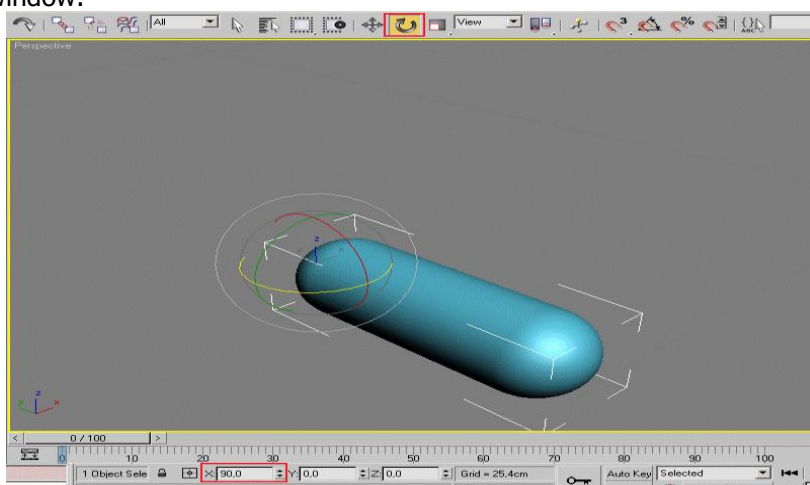
^{1,2}Faculty of Information Technology and Computer Engineering, Lecturers of Computer Engineering Department, *Andijan State University*.

Article history:	Abstract:
<p>Received: May 26th 2021</p> <p>Accepted: June 7th 2021</p> <p>Published: July 14th 2021</p>	<p>This paper illustrates instructions and recommendations of practical stages of creating USB flesh disk with simple primitive (Capsule Primitive) tool in 3DS MAX software for practical lessons in 3D modelling and computer graphics.</p>
<p>Keywords: Autodesk 3ds Max 2009 software, primitives, Extended Primitives command, Geometry section, Capsule, Select and Rotate, Convert to Editable Poly, Vertex, Edge, Border, Polygon, Element, Toolbar (Main Toolbar), Rendering.</p>	

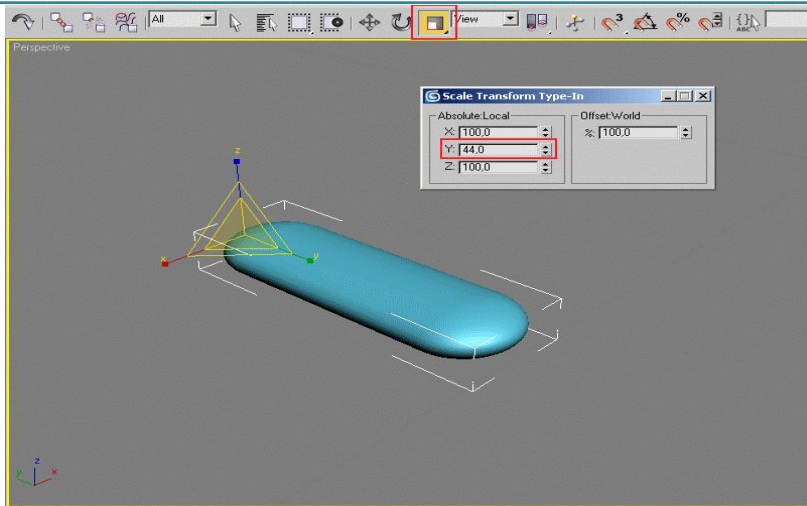
First, we run Autodesk 3ds Max 2009, then we press Capsule button on Extended Primitive section of Geometry tool. We enter parameter values as shown in the picture below then click OK button.



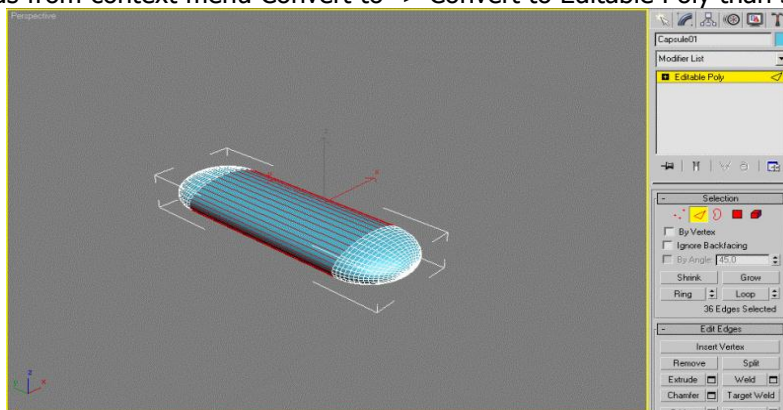
Rotate object to 90° value on X axis. To perform this, press Select and Rotate command and enter 90° to X value at the bottom of window.



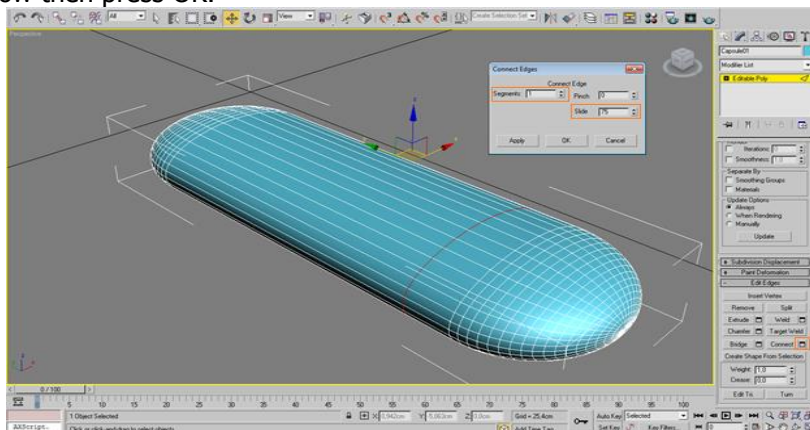
Zoom in object through Y axis. Right click mouse on Select and Uniform Scale button, on the created window enter 44.0 value to Y axis field.



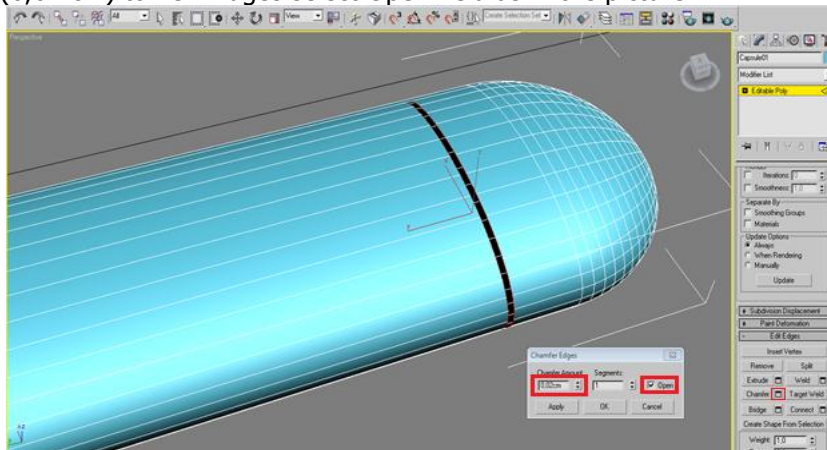
Jump to the Edge mode by pressing F3 key on keyboard, move mouse on the object and right click on it, select following commands from context menu Convert to -> Convert to Editable Poly than select Edit Edges button.



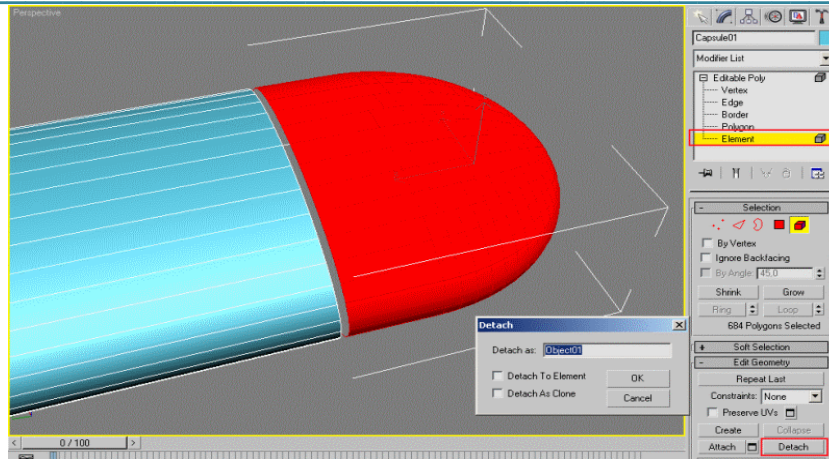
Press Connect button on Edit Edges section. Write 1 on the Segments field and write 75 on the Slide field as shown in the picture below then press OK.



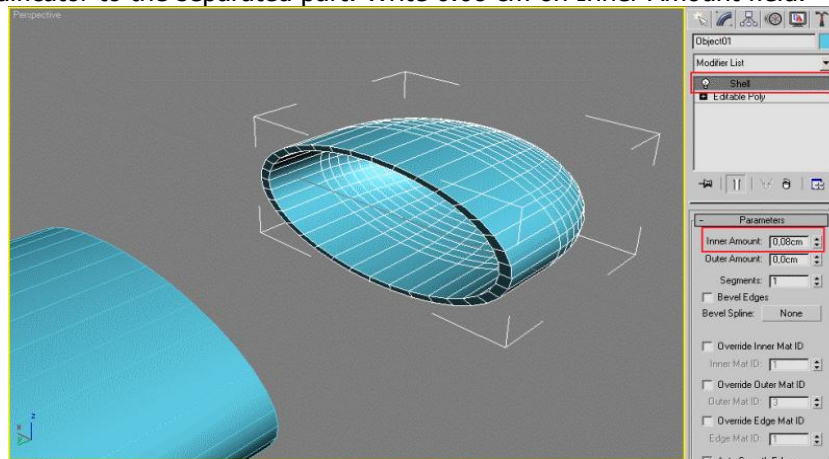
Apply Chamfer (0,02 cm) to new Edges select Open field as in the picture.



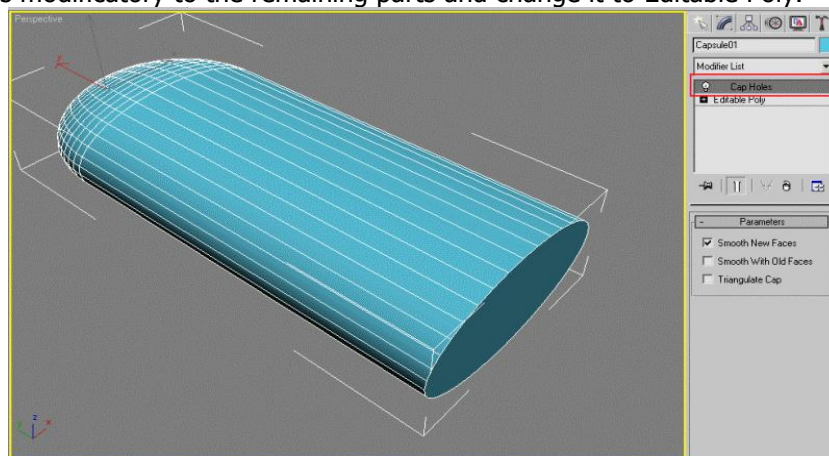
Jump to the Element Editing mode, right click on a mouse and select Detach on Edit Geometry bundle then press OK. Now it is shown as a separate object.



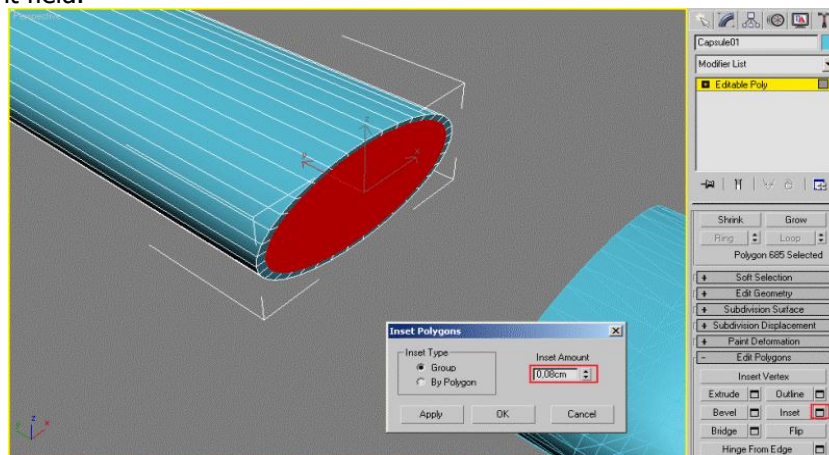
Apply Shell modifier to the separated part. Write 0.08 cm on Inner Amount field.



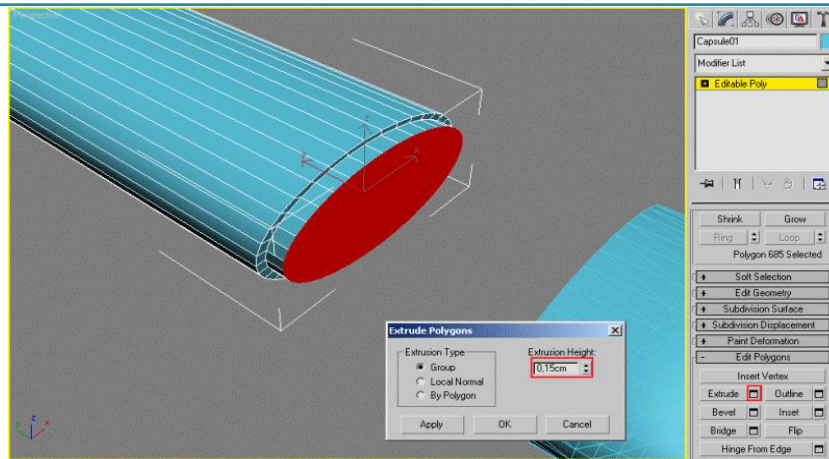
Apply Cap Holes modifier to the remaining parts and change it to Editable Poly.



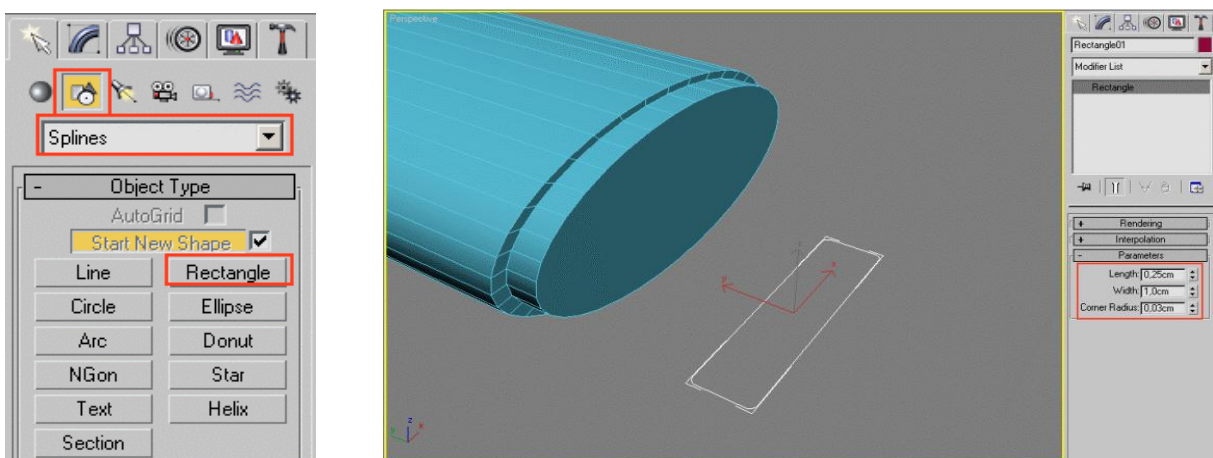
Move to the Polygon Editing mode then select polygon from front side of object. Press Inset button and enter 0.08 cm in Inset Amount field.



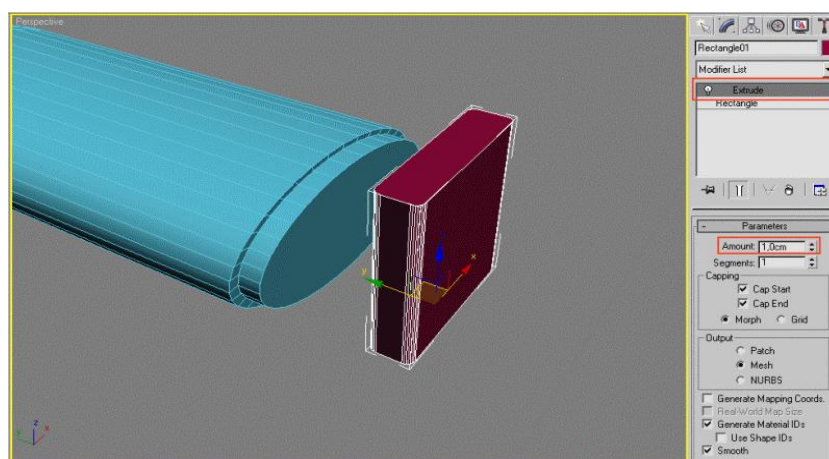
Now select Extrude and enter 0,15 cm in Extrusion Height field.



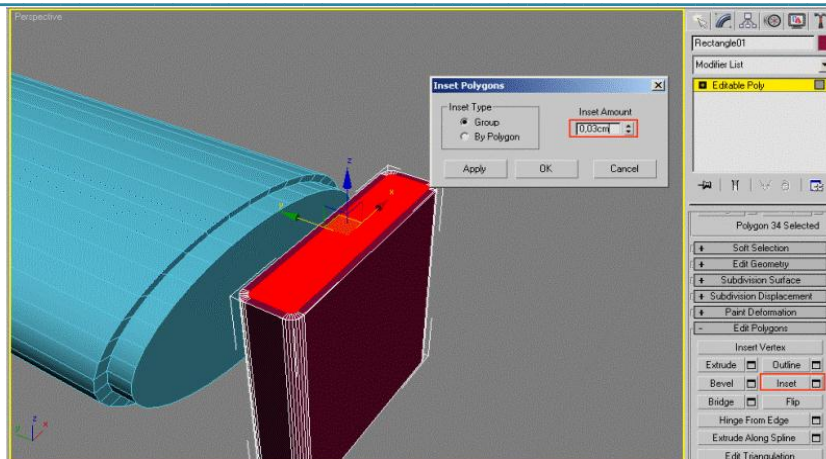
Now, create rectangle by following commands Create -> Shapes -> Splines -> Rectangle. Enter parameter values as shown in the picture below.



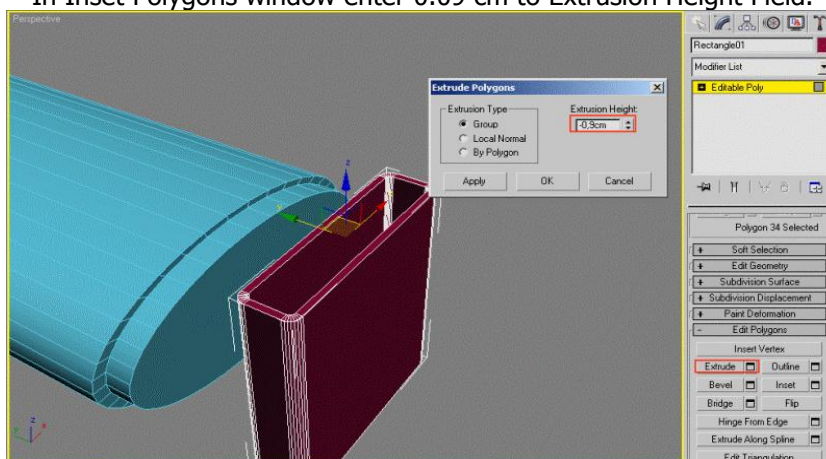
Change Extrude modificatory by giving 1 cm value o the rectangle.



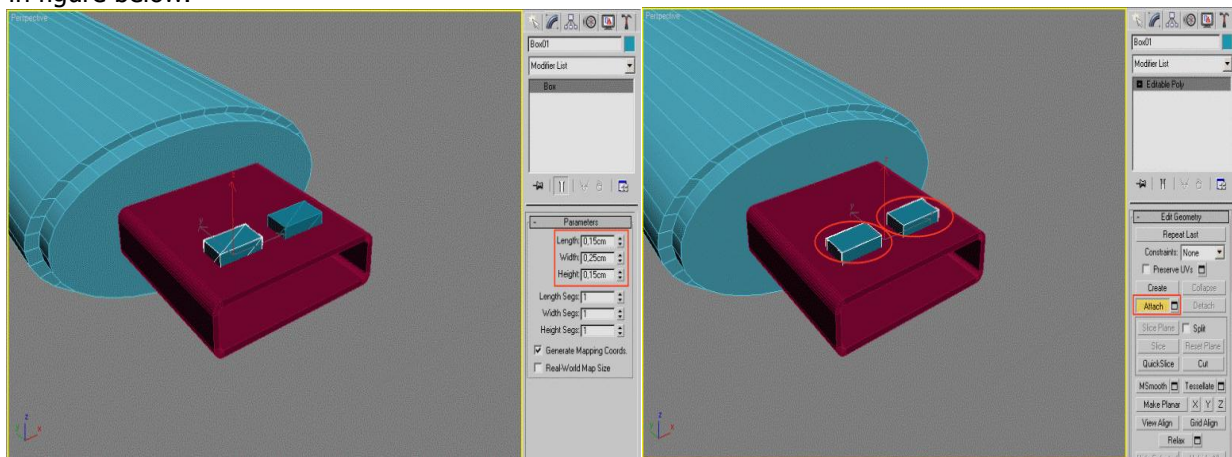
Modify achieved object to Editable Poly, select top side of objects end assign 0.03 cm value to Inset field.



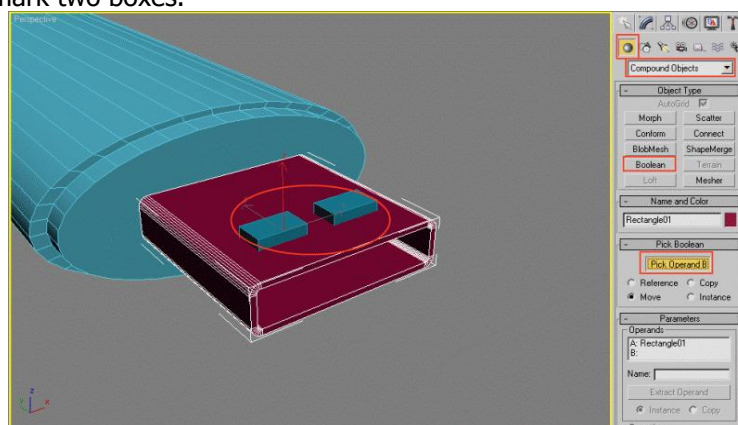
In Inset Polygons window enter 0.09 cm to Extrusion Height Field.



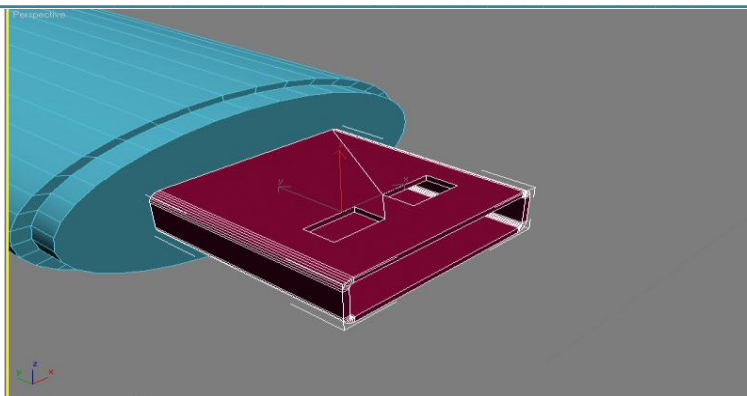
Rotate created connector neck of flash drive and move flash disk to the left. Create two Box (Parallelepiped) objects, then change one of them to Editable Poly which can be separated, attach one to another by Attach button as shown in figure below.



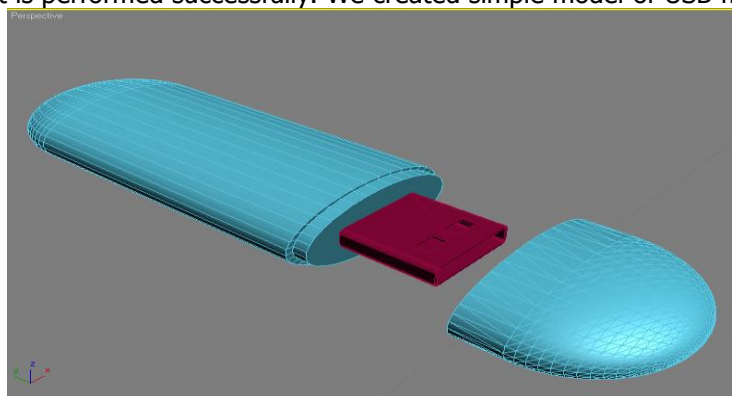
After that, perform selection of following sequence of buttons which applied to the connector neck. Select Pick Operand B command and mark two boxes.



Expected model should appear as follow:



Finally, it is performed successfully. We created simple model of USB flash drive.



We save this model by File -> Save commands with fleshka.max file extension.

REFERENCES.

1. X.D.Yuldashev. Kompyuter grafikasi. O'quv qo'llanma. -T.: «Tafakkur», 2020, 310 b.
2. Yuldashev. X.D. 3ds max dasturining imkoniyatlari. Андижон машина-созлик институти "МАШИНАСОЗЛИК" илмий хабарномаси 2019, №1 (13). 56-63 бет. Андижон - 2019 й.
3. <http://www.3dmax-tutorials.ru/> - Tutorial of 3Dmodelling.