**SUMMARY**

In summary, we can define 4D as the process of printing miniature or life-size replica or model in 4 dimensional space.

We can list the uses of 4D printing

1. Used in aerodynamics (There is a rule in aerodynamics, that the lighter the mass of the body which in this case an air transportation means e.g planes, helicopter, drone etc. the longer and faster the body gets in air. From this theory we know that there are some areas in an airplane that are 4D/3D printed).
2. Used in Medical Places (During the making of a medical instruments like the ventilator there are parts that can be 4D printed, since there are some area in the machine that are plastic like material)
3. They also used to build houses, over the years as 3D printing was existing, people discovered better use for it by using it to print houses, it saves the use of eco unfriendly materials and the machine print the house with 0.001 accuracy.
4. It also reduces the plastic pollution in the world due to the fact that we can use plastic and the mixture of some chemicals as the material for printing thereby achieving recycling.

The process undergoing when its printing is what we know as sterolithography

**ADVANTAGES OF 4D PRINTING**

1. It can be used ti replicate anything.
2. It is used in various aspects of computer science
3. It reduces the plastic pollution in the world.

**DISADVANTAGES OF 4D PRINTING**

1. It is very expensive.
2. It takes time to print.
3. The bigger the blue print of the project the bigger the machine needs to be,

That could require a lot of spacing area.

**CONCLUSION**

In conclusion, 4D printing has not fully evolved to the expect level it should be due to the slow development of softwares that uses