Key terms

Computer Graphics: the art or science of producing graphical image with the aid of computer

Input: multi sides array, coordinates, RGB output: graph

* Rendering: rendering or image synthesis is the automatic process of generating a photorealistic or non-photorealistic image from a 2D to 3d modal by means or computer programs.
* Wire framing: wire framing is the process of visual presentation of a three-dimensional or physical object used in 3-D computer graphics. It is an abstract edge or skeletal representation of a real world 3-D object using lines and curves. Because each object that makes up a wireframe model must be independently drawn and positioned.
* Ray tracing: a rendering technique for generating an image by tracing the path of light pixels in an image plane and simulating the effects of its encounters with virtual objects. The technique is capable of producing a very high degree of visual realism, quite higher than that of typical scalene rendering methods, but at a greater computational cost.
* Lighting: the simulation of light in computer graphics. This simulation can either be extremely accurate, as is the case in an application like radiance which attempts to track the energy flow of light interacting with materials using radiosity computational techniques.
* Key frame: a keyframe in animation and filmmaking is a drawing that defines the starting and ending points of any smooth transition. The drawings are called ‘frames’ because their position in time is measured in frames on a strip of film. A sequence of keyframes defines which movement the viewer will see, whereas the position of the keyframes on the film, video, or animation defines the timing of the movement.
* Mapping: Texture mapping is a method of adding realism to a computer-generated graphic. An image (the texture) is added (mapped) to a simpler shape that is generated in the scene, like a decal pasted to a flat surface. This reduces the amount of computing needed to create the shapes and textures in the scene. For instance, a sphere may be generated and a face texture mapped, to remove the need for processing the shape of the nose and eyes.
* Texture
* 3D animation: 3D Animation is the art of creating an object and making it move, act, and react within virtual 3D space. Form and function within a 3D environment is limitless and can be used to create cartoons, flying logos, motion graphics, visual effects, and anything else imaginable.