The methods which are used for the production of electrical energy contaminate our nature. Fossil energy sources (coal, oil, natural gas) thermal reactor, hydroelectric power station are commonly used and they are methods which damage our nature so eco-friendly systems should be developed and expanded for a better world. One of the eco-friendly systems which are commonly used is PV (photovoltaic) systems in recent years. Maximum Power Point Trackers (MPPT) are used to get potential maximum power from Photovoltaic Source Energy Production Systems. Using MPPT, it is aimed to reduce minimal levels the situation of not able to take electric energy which is taken from photovoltaic panels because of load and environmental conditions. In this study, smart playground lighting which powered with solar energy was carried out. Perturb & Observe algorithm which is used to find maximum power point was used. A lighting system which works with solar energy was used to test created Photovoltaic system.