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Design and Implementation of Anti-gravity Treadmill

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The treadmill is considered one of the most widely used equipment to achieve high standards of physical fitness and rehabilitation. The aim of the work presented in this paper is to choose suitable regular treadmill and transfer it into anti-gravity treadmill. The design procedure depends on calculating the required lift force subjected to the lower part of the human body enough to raise it during the exercise. The source of lift force comes from a blower with variable speed motor. The human wear a special short connected to pressurized elastic rubber container, when the air below it fills the container and thrust force exist which leads to suitable apparent weight to raise the efficiency of the exercise.