

	Advantage	Disadvantage
Design 1	<ul style="list-style-type: none"> • Efficiency is great • Code is simple but large as it must incorporate both the modules of systems 	<ul style="list-style-type: none"> • Memory consumption of this is very large
Design 2	<ul style="list-style-type: none"> • Polar coordinates are useful when studying the motions of the human body. This is because the human body utilizes pivotal joint movements. • When discussing orbits, where radial symmetry is involved, or there is a point source, such as the generation of ripples in water, polar coordinates simplify matters. • It is used in the positioning of the object This can be used to make an object orbit around another object. • Implementation is simple 	<ul style="list-style-type: none"> • Limited collision avoidance • Not very efficient • Positional error is large in these systems
Design 3	<ul style="list-style-type: none"> • Calculations of distances between points are trivial. • Calculations of areas are relatively easy. • Graphic representations are realistic, provided the area covered is not too large. • Implementation is easy • Efficiency is good as compared to design 2 	<ul style="list-style-type: none"> • These systems are not suitable in solving complex problems • Memory consumption increases as compared to design 2
Design 4	<ul style="list-style-type: none"> • Efficiency is very high • Almost all the easy as well as complex are solved by this type of design. 	<ul style="list-style-type: none"> • Complexity of the code increases • Memory consumption is greatest compared to design 1,2,3,5 because

	<ul style="list-style-type: none"> • Implementation is easy 	<ul style="list-style-type: none"> • of incorporating other variables • Simplicity of the code decreases
Design 5	<ul style="list-style-type: none"> • It is simple to code as both the modules are incorporated in the program. • Efficiency of the code depends on the problem type • Error detection is easy 	<ul style="list-style-type: none"> • Memory consumption is more as compared to design 1,2,3 but less than 4