Module B: Development

1.Diagrams of system requirement

System requirement	Categary	Function
Abseil	Mechanical Component	Drop or lift the rope
Mechanical Arm	Mechanical Component	Grab or drop relief goods
Delivery Box	Mechanical Component	Store relief goods
Solidworks	Software	Design components of drone
Qground Control	Software	Debug the drone
Clover Blocks	Software	Realize automatic tracking function

2.Prototype

(1) Abseil:

1) Drawings:

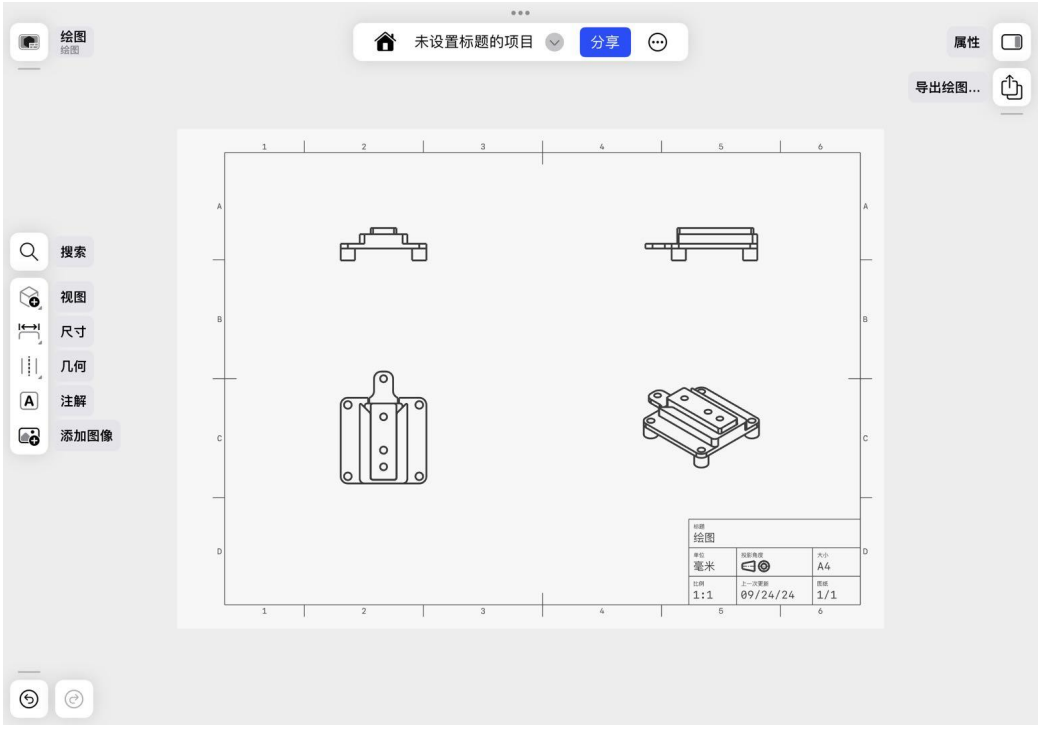

Fig.1 Drawings of Closed Abseil

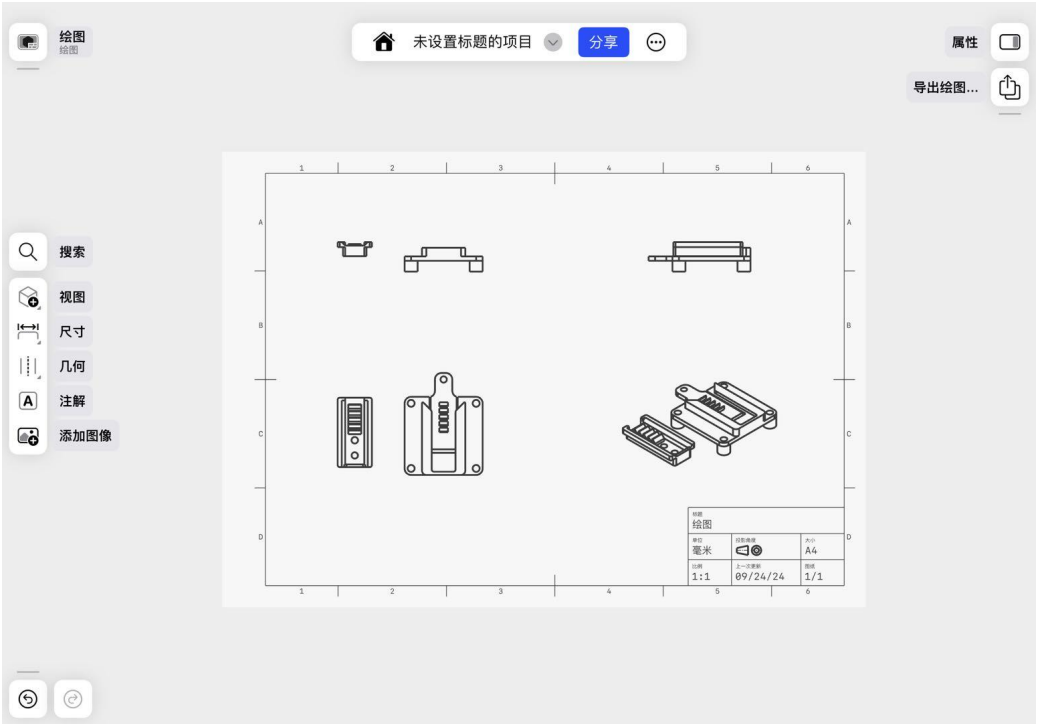

Fig.2 Drawings of Opened Abseil

2)Mockups

Fig.3 Mockups of closed Abseil

Fig.4 Mockups of opened Abseil

(2) Mechanical Arm:

1) Drawings:

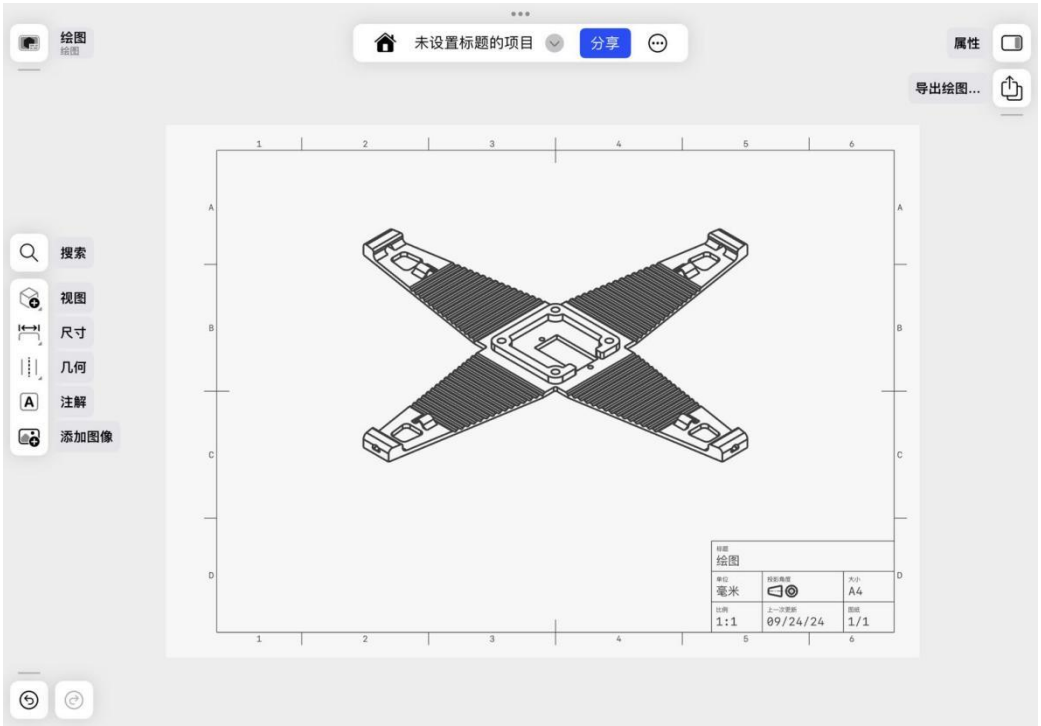

Fig.5 Drawings of Mechanical Arm

2) Mockups

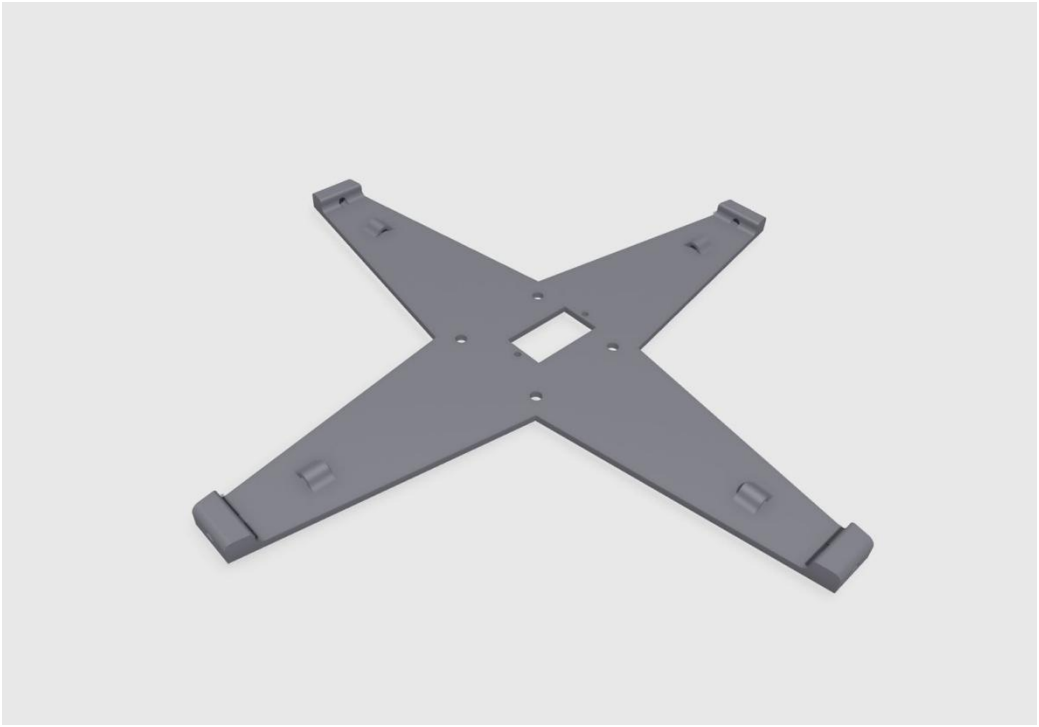

Fig.6 Mockups of Mechanical Arm

(3) Delivery Box:

1) Drawings:

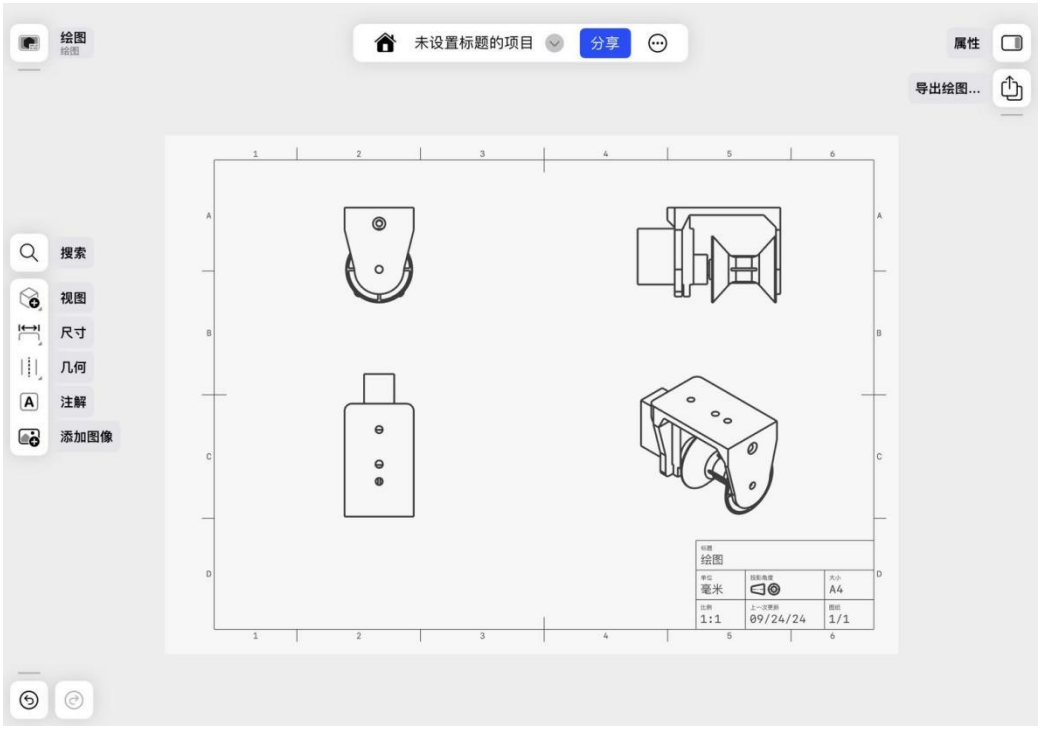

Fig.7 Drawings of Delivery Box

3) Mockups

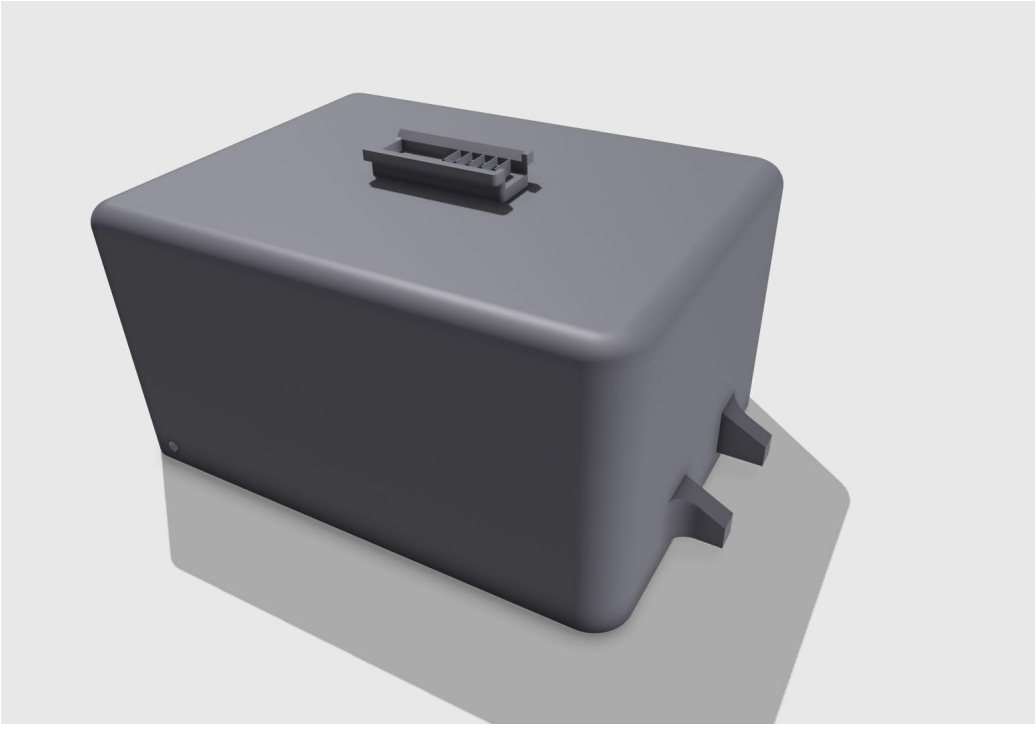

Fig.8 Mockups of Delivery Box

3.Code

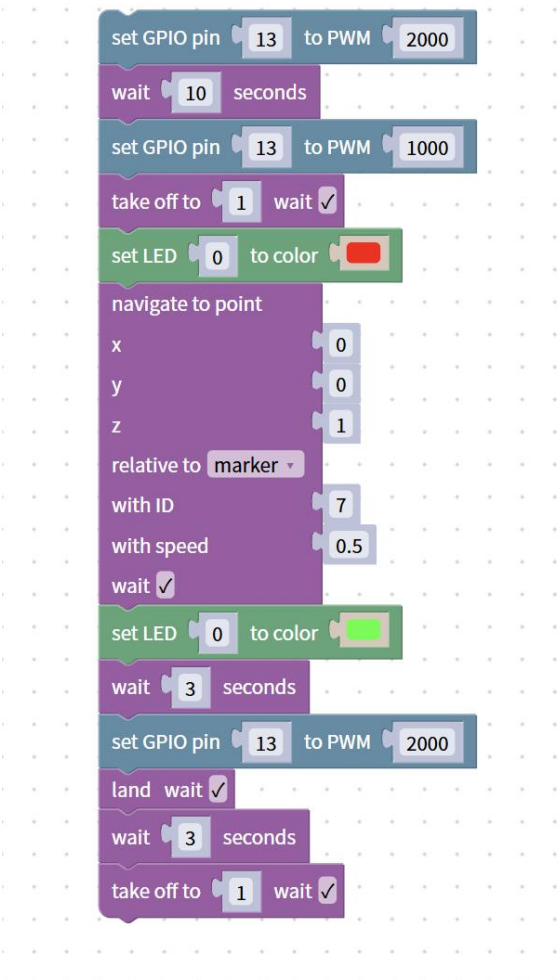

Fig.9 Code1-1

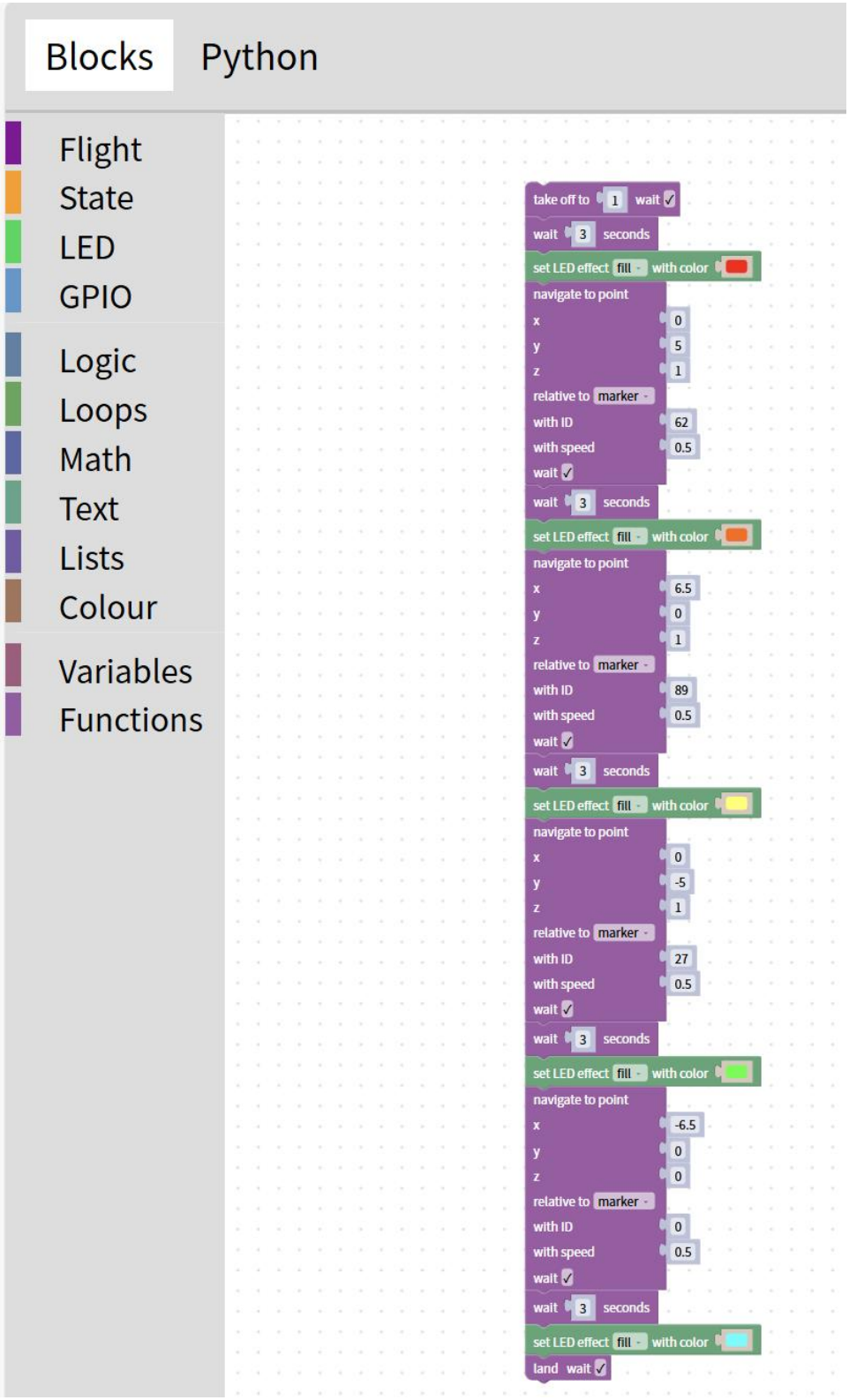

Fig.10 Code1-2

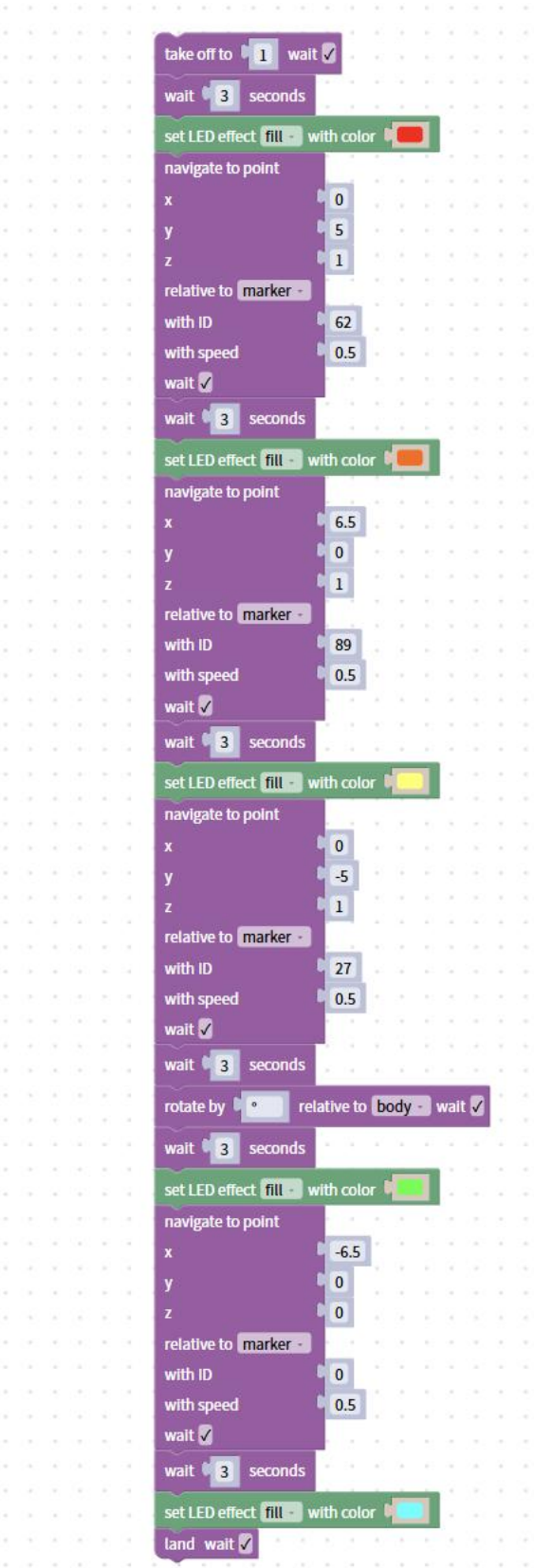

Fig.11 Code1-3

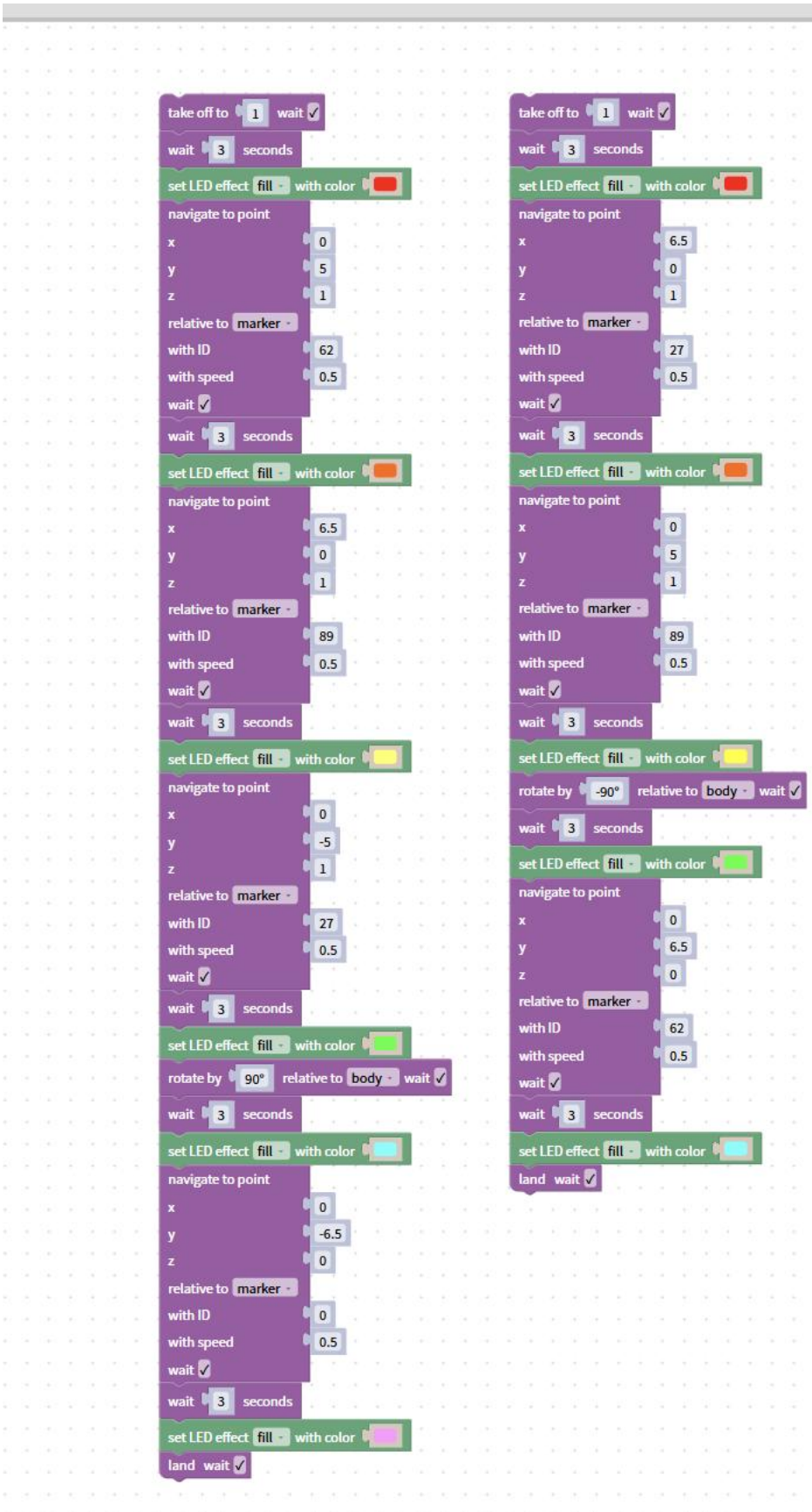

Fig.11 Code1-4