Task 2. Answer the following questions

Q8. What is the program requirement of the rocket ship program? Write it in your own words.

Ans. Here are the following requirements.

The user controls the movement of spaceship with mouse. The spaceship will dodge stars and planets that are moving randomly in space. If spaceship hits an obstacle, it will make a sound.

Q9. Which sprite does this program have? Write down what each sprite does.

Ans. This program have 3 sprites. Rocket ship, Planet2, star. Planet and star are moving randomly in the space and rocket move according mouse pointer. If rocket hits any obstacle it gives sound.

Q10. Why is it necessary to set the size and position of the sprite at the start of the program? Explain.

Ans. It is necessary to set the size and position of the sprite at the start of the program to give it a neat look. It gives best understanding. It works smoothly.

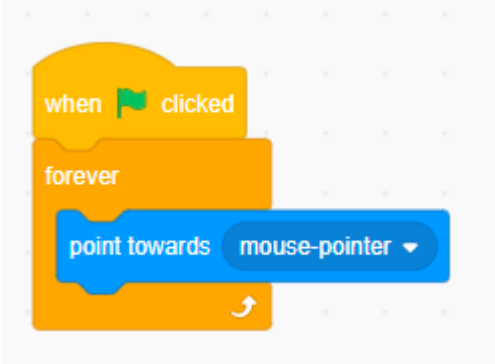
Q11. What are the outputs of this program?

Ans. The output of the spaceship game is. Planet and star are moving randomly and bounce on edge. Rocket is moving according mouse pointer. If it hits the star make sound and decreases the crash point.

Q12. How do you make the spaceship follow the movement of the mouse pointer in scratch?

Ans. To make the spaceship follow the mouse pointer in Scratch, follow these steps:

1. Select the spaceship sprite.
2. Add following code in script area.



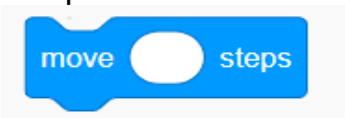
Click the **green flag**, and the spaceship will move wherever you move the mouse.

Q13. How do you make the star turn around and bounce when it touches the edge?

Ans. Select the star sprite. Add following code in the script area:

Click the **green flag**, and the star will move and bounce when it touches the edge.

Q14. How can you make the sprites move faster or slower?

Ans. In Scratch, you can make sprites move faster or slower by changing the number of steps they move. 

- To make a sprite move faster, increase the number. For example move 10 steps.
- To make a sprite move slower, decrease the number. For example move 3 steps.

Q15. The user provide input to a program. State one thing the user does to control this program.

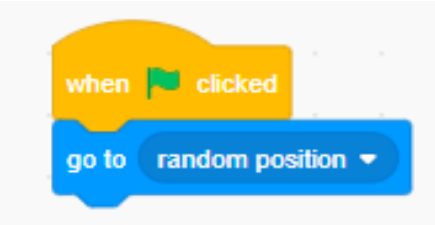
Ans. In this program spaceship is controlled by the user. It will follow the mouse pointer. The user can **move the mouse pointer** to control where the spaceship goes. This helps the user avoid obstacles.

Q16. What is the function of forever block?

Ans. The forever block in Scratch is used to repeat actions again and again without stopping. It keeps running the blocks inside it forever, until the program is stopped.

Q17. How can you make the spaceship jump to a random position?

Ans. To make the spaceship jump to a random position in Scratch, Following code is written.



When green flag click spaceship move to random position.

Q18. How can you increase the difficulty level of the game? Write in your own words.

Ans. You can increase the difficulty level of the game by adding more the obstacles like star and planets, adding points like crash point, or by making the obstacles move faster.