Task 2.7

1. This is a small cricket gam where two players will play the game , here you have to create some functions which will have their business logic, now consider the below points for all functions:

   A. Balls() : This function will throw ball after taking input from user by allowing player to press b/B to throw ball. As players presses b/B then ball will be thrown and it will generate any random no from 1 to 6 including 6. As per the random number generated , it will call the other functions with names:
      i.   IF one comes than call SingleRun(), score will be incremented by 1
      ii.   IF two comes than call DoubleRun(), score will be incremented by 2
      iii.   IF three comes than call TripleRun(),score will be incremented by 3
      iv.   IF four comes than call Four(), score will be incremented by 4
      v.   IF five comes than call WhiteBall(), score will be incremented by 1
      vi.   IF six comes then call Six(), score will be incremented by 6

   Every function will increment the score accordingly along with they will display that much number of lines in different colors. For example, if SingleRun() function is called , then it will increment the score by 1 and will display one line in any color. If DoubleRun() function get called then it will increment score by 2 and will display 2 lines also with different colors. Similarly for others.

   B. Both Players will play the game for 6 balls, means firs player will call Balls() function six times and this function can call any function inside it according to the random number comes.
   C. At last the winner will be declared.

2. Display an array of 6 X 6 (6 rows and 6 columns) with random numbers between 1 and 20. Now perform below operations by making various functions with different names as Question1() , Question2() etc.:

A. Show user any random number from the numbers coming in array and ask user to count how many time it is coming in array. Accept answer and display whether answer is correct or not along with the calculated time user took in seconds to answer it. (Score – 2)

B. Ask user to Count total unique even numbers. Accept answer and display whether answer is correct or not along with the calculated time user took in seconds to answer it. (Score – 2)

C. Ask user to Count total unique odd numbers. Accept answer and display whether answer is correct or not along with the calculated time user took in seconds to answer it. (Score – 2)

D. Ask user to Count total unique numbers. Accept answer and display whether answer is correct or not along with the calculated time user took in seconds to answer it. (Score – 2)

E. Ask user to Count total unique prime numbers coming in the array. Accept answer and display whether answer is correct or not along with the calculated time user took in seconds to answer it. (Score – 3)

F. Ask user to sum the total numbers in any row that will be generated randomly by program. E.G. at run time a random line no will be generated and will be shown to user for adding all numbers coming in that line. Accept answer and display whether answer is correct or not along with the calculated time user took in seconds to answer it. (Score – 4)

G. At run time generate any random column number and ask user to add all number in that column. Accept answer and display whether answer is correct or not along with the calculated time user took in seconds to answer it. (Score – 4)

H. Display to user every number coming in array along with their total no of times it is repeating, E.G. Number – 2, Repeating – 5 times. Similarly others. (Score – 0)

Finally display his all correct answers with question numbers and display the final score for correct answers.

3. Display an array of size 4 X 4 with random characters and perform the below operations:

   A. Ask user to give any number from user between 1 and 10, check whether it is in range or not if not then ask user again to give and keep on till user does not give number in range. (E.g. user gave 5)
   B. Ask user any row number between 0 and 4 (excluding 4), check whether it is in range or not if not then ask user again to give and keep on till user does not give number in range. (E.g. Random row number 2).
   C. Ask user to give any column number between 0 and 4 (excluding 4), check whether it is in range or not if not then ask user again to give and keep on till user does not give number in range. (E.g. Random Column no 1)
   D. Generate random row number and column number in range 0-4 excluding 4 and place the number (E.g. 5) given by user in Step A to random index in array. Check whether number's position in array is at the row number (E.g. 2) given by user in step B or is at in column number given by user in step C (E.G. 1).