```
import java.util.Scanner;
import java.io.*;
//Melisa Andreea Bogdan
//This program is about exploring the booby-trapped castle Game

class Traps
{
  int roomNumber;
  String findObject;
  String trapObject;
}

class Castle
{
  int rooms;
  boolean explored; // true if the room was explored in a castle, false
otherwise
  Traps t5;
}

class miniproject
{

    public static void main (String[] p) throws IOException
     {
      try {
      BufferedReader inStream = new BufferedReader(new
FileReader("in.txt")); // reads input from the file in.txt
      PrintWriter outStream = new PrintWriter(new
FileWriter("output.txt"));  // prints in the file out.txt
      //String line = inStream.readLine();
     // inStream.println("oof");
      Traps[] t = new Traps[5];
      for(int i = 0; i<4; i++){
        int x = Integer.parseInt(inStream.readLine());
        String item = inStream.readLine();
        String second = inStream.readLine();
        t[i] = generateTraps(x, item, second); // generating traps from the
input file
      }
      inStream.close();
      Traps t1 = t[0];
      Traps t2 = t[1];
      Traps t3 = t[2];
      Traps t4 = t[3];
      Traps t5 = t[4];
      Castle room5 = generateCastle(5, false);

      print("How many players are going to play?");
      int numberOfPlayers= inputInt();                  // gets the number
of players
      int [] players = new int [numberOfPlayers]; // initializing the array
      for( int i=0;i< numberOfPlayers; i++)             // playing the turn
of each player and adding their score in the array
      {
        int j=i+1;
        print("***** Player " + j + " *****");
        players[i] = ask(t1,t2,t3,t4,t5, room5);
        save(players[i]);
        //outStream.println("Player " + j + " score is: "+players[i]);
        if( i!= numberOfPlayers-1){
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            print("Now is next player's turn:");
            updateRoom5(room5, false); }
        }
        int [] copyPlayers= new int [numberOfPlayers];  // making a copy of
the initial array for safe keeping
        for( int i=0; i<copyPlayers.length; i++)
            copyPlayers[i]= players[i];                 // copying each
element in the new array

        sort(players);
        printTable(copyPlayers, players);// sorting the score table based on
the biggest points

        outStream.close();
        } catch (IOException e) {
          print("Error");
        }

        System.exit(0);
    }

    public static int ask(Traps t1, Traps t2, Traps t3, Traps t4, Traps t5,
Castle room5) // setting and returning the score to 0 for every new player
     {
        int score=0;
        int theScore= Adventure(score, t1, t2, t3, t4, t5, room5);
        return theScore;
    }

    public static void save(int score) throws IOException
     {
        PrintWriter outStream = new PrintWriter (new
FileWriter("output.txt"));
        String scoreString = Integer.toString(score);
        outStream.write(scoreString);
        outStream.close();
    }

    public static int load() throws IOException // loads information ( the
score ) from the outputfile
     {
        BufferedReader inStream = new BufferedReader(new
FileReader("output.txt")); // reads input from the file in.txt
        int x = Integer.parseInt(inStream.readLine());
        inStream.close();
        return x;
    }

    public static int Adventure (int score, Traps t1, Traps t2, Traps t3,
Traps t4, Traps t5, Castle room5)
    {

        String printstring;
        String answer;
        int [] rooms = new int [6];
        print("You are currently in an abandoned castle from the XV
century.");
        print("You have to make multiple choices throughout the
exploration.");
        answer= inputString("Do you want to explore the castle?");
        print("");
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```
      print("You have no choice but to follow the trail.");
      print("");
      printstring = ("Your current score is: " + score + " points.");
      String answer1= inputString("  Do you want to go left or right?");
      print(printstring);
      ////////////////////////////////////////////////////////// FIRST
CHOICE

      print("You see a golden, a green, blue, white and black door. You can
see written all over them 'DO NOT ENTER' in red paint.");
      print("These doors corresponds to rooms 1, 2, 3, 4, 5. You have the
choice to enter one room.");
      int ans= inputInt();
      int ct=0;
      while( ans!=0 )
      {

        if ( ans == getRoomNumber(t1))
        {
           rooms[1]=1;
           score= score + Room1(score, t1);
           ans= CheckForNewRoom(rooms, ct, room5);
           ct+=1;

         } else if ( ans == getRoomNumber(t2))
         {
            rooms[2]=1;
            score= score + Room2(score, t2);
            ans= CheckForNewRoom(rooms, ct, room5);
            ct+=1;

          } else if ( ans == getRoomNumber(t3))
         {
            rooms[3]=1;
            score= score + Room3(score, t3);
            ans= CheckForNewRoom(rooms, ct, room5);
            ct+=1;

         } else if ( ans == getRoomNumber(t4))
         {
            rooms[4]=1;
            score= score +  Room4(score, t4);
            ans= CheckForNewRoom(rooms, ct, room5);
            ct+=1;

          } else if (ans == getRoomnumber(room5))
          {
            rooms[5]=1;
            //System.out.println(ct);
            score= score + Room5(score, room5, t5);
            ans= CheckForNewRoom(rooms, ct, room5);
            ct+=1;

          } else
          {
            print("You entered a non-existing room number. Check your
spelling.");
            print(printstring);
            ans= CheckForNewRoom(rooms, ct, room5);

         }
```

```
      }
      print("GAME OVER");
      print("Your final score is: "+ score);
      return score;
     }

     public static Traps generateTraps (int roomNumber, String findObject,
String trapObject) // The method is the frame/body of a station
    {
      Traps t = new Traps();
      t.roomNumber = roomNumber;
      t.findObject = findObject;
      t.trapObject = trapObject;
      return t;
    }

     public static Castle generateCastle (int rooms, boolean explored) //
The method is the frame/body of a castle
    {
      Castle c = new Castle();
      c.rooms = rooms;
      c.explored=explored;
      return c;
    }

    public static int getRoomnumber (Castle room5) // method for getting
the name of the room of time Castle
    {
      return room5.rooms;
    }

    public static int Room1 (int score, Traps t1) // Method used in case
the user enters room 100
    {
      print("Your score is :" + score);
      print("You entered Sultan's Chamber.");
      print("HINT: Look for misterious objects to find the next clue.");
      boolean exit=true;
      int intermediateScore=0;
      while( exit ) // exits the while loop when the player has enough
points
      {
            int ct=0;
            while ( ct==0) // repeats code while the user has enough points
            {   String answer= inputString("You can check for clues: A. in
a dark corner of a room, B. under a goldem table. Type in the letter of
your choice:  ");
                intermediateScore=0;
                if (answer.equals("A") )
                {
                      print("You get closer to the left corner. It takes
you seconds to adjust to the dim light then you start looking around.");
                      print("You see many fancy porcelain dolls and gold
statues on small tables near a bed. You start looking for clues.");
                      answer= inputString("You see something out of
ordinary under a cloth. Do you want to take a look?");
                      answer = answer.toLowerCase();
                      if( answer.equals("yes") )
                        {
                            intermediateScore=intermediateScore+ 10;
                            print("Nothing to see here.");
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                            print("Your score in this room is: "+
intermediateScore);

                          } else
                          {
                             print("Keep looking.");
                          }
                         answer= inputString("You see something under one of
the dolls. Do you want to take a look?");
                         answer = answer.toLowerCase();
                        if( answer.equals("yes") )
                          {
                             intermediateScore+=5;
                             print(" You found an encripted message. ");
                          } else
                          {
                             print("Keep looking.");
                          }
                        print("You can feel the floor is trembeling
underneath you.You activated the " + getTraps(t1) +
                        " trap. Pieces of the floor are falling down into a
big hole but you see a rope hanging from ceiling with a "
                        + getObject(t1) + " attached to it and you try
reaching out for it.");
                        if( intermediateScore >= 5 ) // Save the user based
on points
                          {
                             print("You succesfully save yourself from
falling. Well done.BONUS: You got the key!");
                             intermediateScore+=5;
                          } else
                          {
                             print("Phew! That was close! You failed to
catch the rope in time and saved yourself in the last second.");
                          }
                        //System.out.println("Your score in points is " +
intermediateScore);
                        if( intermediateScore < 15 )
                          {
                             print("Oh no!You don't have enough points to
leave the room. ");
                          } else
                          {
                             ct=1;
                             exit=false;
                          }
                    } else if (answer.equals("B"))
                  {
                             intermediateScore = 0;
                         // If the user's input is  B then we execute the
following blocks:
                             print("You get closer to the right corner. It
takes you seconds to adjust to the bright light then you start looking
around.");
                             print("You see a dusty golden table with many
antique objects on it. You start looking for clues.");
                             answer= inputString("You see something that
appeared shiny in the sunlight. Do you want to take a look?");
                             answer = answer.toLowerCase();
                             if( answer.equals("yes") )
                             {
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                                intermediateScore+=10;
                                print("You found a key that seem to match one
of the many boxes on the table.");
                              } else
                              {
                                print("Keep looking.");
                              }
                              answer= inputString("You see something under one
of the golden boxes. Do you want to take a look?");
                              answer = answer.toLowerCase();
                              if( answer.equals("yes") )
                              {
                                intermediateScore+=5;
                                print("There is a message written on a piece of
paper: USE THE KEY TO UNLOCK THE BOX OF THE UNKNOWN.");

                              } else
                              {
                                print("Keep looking.");
                              }
                               print("You can feel the floor is trembeling
underneath you.You activated the " + getTraps(t1) +
                              " trap. Pieces of the floor are falling down into
a big hole but you see a rope hanging from ceiling"+
                              " and you try reaching out for it.");

                              if( intermediateScore >= 5 ) // Save the user
based on points
                              {
                                print("You succesfully save yourself from
falling. Well done.");
                                intermediateScore+=5;
                              } else
                              {
                                print("Phew! That was close! You failed to
catch the rope in time and saved yourself in the last second. BONUS: You
got the key!");
                              }

                              if( intermediateScore <= 15 )
                              {
                                print("Oh no!You don't have enough points to
leave the room. Try again or choose another letter.");
                              } else
                                {
                                   ct=1;
                                   exit=false;
                                }
                        } else
                           {
                               intermediateScore=0;
                               print("You entered none of the letters above. Check
your spelling.");  // we execute this if the user entered a wrong letter
                            }

                         //score= intermediateScore;
                    } int s= score + intermediateScore;
                System.out.println("Your current score in this room is: " + s);

             }
            return intermediateScore;
```

```
    }

    public static int Room2 (int score , Traps t2) // method for entering
room2
    {
      int intermediateScore=0;
      print("Your score is: " + score);
      print("You entered The Amazonian Jungle.");
      print("HINT: Look for misterious objects to find the next clue.");
      String answer= inputString("Do you want to look left or right?");
      answer = answer.toLowerCase(); // converting the answer to lower case
      boolean exit = true;
      while(exit)
      {
          intermediateScore=0;
          if (answer.equals("left"))
          {
            intermediateScore+=5;
            answer = inputString("You see a silver chest. Do you want to
look at it?");
            answer = answer.toLowerCase();
            if( answer.equals("yes"))
            {
               intermediateScore+=5;
               print("You remember you got the key from a previous room and
you try to open the chest with it.");
               print("IT WORKS!");
               intermediateScore+=5;
            } else
            if(answer.equals("no"))
            {
              print("Keep looking.");
              intermediateScore+=5;
            }
            answer=inputString("OOPS. You unlocked the "+
getTraps(t2)+"trap. What do you do?"+
            "Your choices: A. fight the scorpions, B. Distract them then
Run to the door.");
            answer=answer.toUpperCase();
            if(answer.equals("A"))
            {
              print("Oh oh. Wrong choice. TRY AGAIN");
              Room2(score,t2);
            } else if( answer.equals("B"))
            {
              if(intermediateScore>=10){
              print("You managed to escape & you succesfully left the
room.");}
              else
              {
                print("The scorpions chased you but you managed to escape
after all. ");
              intermediateScore-=5;
              }
            }


          } else if (answer.equals("right"))
          {
            intermediateScore+=5;
```

```
            print("You remember you got the key from a previous room and
you try to open the chest with it.");
            print("IT WORKS!");
            intermediateScore+=5;
            answer=inputString("OOPS. You unlocked the "+
getTraps(t2)+"trap. What do you do?"+
            "Your choices: A. fight the scorpions, B. Distract them then
Run to the door.");
            answer=answer.toUpperCase();
            if(answer.equals("A"))
            {
              print("Oh oh. Wrong choice. TRY AGAIN");
              Room2(score,t2);
            } else if( answer.equals("B"))
            {
              if(intermediateScore>=10){
              print("You managed to escape & you succesfully left the
room.");}
              else
              {
                print("The scorpions chased you but you managed to escape
after all. ");
              intermediateScore-=5;
              }
            }

            } else
          {
              print("You entered a non valid option. Please enter A or
B.");
          }

          if(intermediateScore>=10)
          {
            exit=false;
          } else print("Oh oh! You don't have enough points to leave!");
      }
      int s= score + intermediateScore;
      print("Your score in this room is: "+ s);
      return intermediateScore;
    }

    public static int Room3 (int score, Traps t3)
    {
      int intermediateScore=0;
      print("Your score is: " + score);
      print("You entered The Underwater Realm of Mermaids.");
      print("HINT: Look for misterious objects to find the next clue.");
      boolean exit=true;
      while( exit ) // exits the while loop when the player has enough
points
      {
            int ct=0;
            while ( ct==0) // repeats code while the user has enough points
            {   String answer= inputString("You can check for clues: A.
under a pile of rocks, B. under a mermaid bridge. Type in the letter of
your choice:  ");
              intermediateScore=0;
              answer = answer.toUpperCase();
              if (answer.equals("A") )
              {
```

```
                    print("You get closer to the left rocks. It takes you
seconds to adjust your eyes in the water then you start looking around.");
                    print("You start looking for clues.");
                    answer= inputString("You see something white and
shiny between rocks. Do you want to take a look?");
                    answer = answer.toLowerCase();
                    if( answer.equals("yes") )
                      {
                          intermediateScore=intermediateScore+ 10;
                          print("You found a magical "+ getObject(t3)
+"!");
                          print("Your score is: "+ intermediateScore);

                       } else
                       {
                          print("Keep looking.");
                       }
                     answer= inputString("You see something far in the
distance . Do you want to take a look?");
                     answer= answer.toLowerCase();
                    if( answer.equals("yes") )
                      {
                         intermediateScore+=5;
                         print(" You found an encripted message. ");
                      } else if ( answer.equals("no"))
                      {
                          print("Keep looking.");
                      } else print("Wrong answer, input the write
letter.");

                    print("You can feel the sand moving underneath
you.You activated the " + getTraps(t3) +
                    " trap.You can save yourself based on your previous
actions.");

                    if( intermediateScore >= 5 ) // Save the user based
on points
                      {
                          print("You succesfully save yourself from being
hit by arrows. Well done.");
                          intermediateScore+=5;
                       } else
                       {
                          print("Phew! That was close! You got hit by one
arrow but it wasn't poisonous! You are still alive.");
                       }
                    if( intermediateScore < 15 )
                      {
                          print("Oh no!You don't have enough points to
leave the room. ");
                      } else
                      {
                         ct=1;
                         exit=false;
                      }
                  } else if (answer.equals("B"))
                {
                          intermediateScore = 0;
                       // If the user's input is  B then we execute the
following blocks:
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```
                        print("You get closer to the bridge. You start
looking around.");
                        print("You start looking for clues.");
                        answer= inputString("You see something that
appeared shiny in the sunlight. Do you want to take a look?");
                        answer= answer.toLowerCase();
                        if( answer.equals("yes") )
                        {
                          intermediateScore+=10;
                          print("You found a magical "+ getObject(t3)+"
!");
                        } else
                        {
                          print("Keep looking.");
                        }
                        answer= inputString("You see something under one
of the golden boxes. Do you want to take a look?");
                        answer= answer.toLowerCase();
                        if( answer.equals("yes") )
                        {
                          intermediateScore+=5;
                          print("There is a message written on a piece of
paper: USE THE KEY TO UNLOCK THE BOX OF THE UNKNOWN.");

                        } else
                        {
                          print("Keep looking.");
                        }
                          print("You can feel the sand moving underneath
you.You activated the " + getTraps(t3) +
                       " trap.You can save yourself based on your previous
actions.");

                        if( intermediateScore >= 5 ) // Save the user
based on points
                        {
                          print("You succesfully saved yourself from
being hit. Well done.");
                          intermediateScore+=5;
                        } else
                        {
                          print("Phew! That was close! You failed to
protect yourself. One arrow hit you but it was not poisonous. You'll
survive.");
                        }

                        if( intermediateScore <= 15 )
                        {
                          print("Oh no!You don't have enough points to
leave the room. Try again or choose another letter.");
                        } else
                          {
                             ct=1;
                             exit=false;
                          }
                  } else
                     {
                         intermediateScore=0;
                        print("You entered none of the letters above. Check
your spelling.");  // we execute this if the user entered a wrong letter
                     }
```

```
            }
            int s = score + intermediateScore;
          System.out.println("Your current score in this room is: " + s);

    }
      return intermediateScore;
    }

    public static int Room4 (int score, Traps t4)
    {
     int intermediateScore=0;
     print("Your score is: " + score);
     print("You entered Heaven On Earth.");
     print("HINT: Look for misterious objects to find the next clue.");
     boolean exit=true;
     while( exit ) // exits the while loop when the player has enough
points
      {
            int ct=0;
            while ( ct==0) // repeats code while the user has enough points
            {   String answer= inputString("You can check for clues: A.
near a tree with golden apples, B. near waterfall. Type in the letter of
your choice:  ");
                intermediateScore=0;
                answer = answer.toUpperCase();

                if (answer.equals("A") )
                {
                      int rightAnswer=0;
                      print("You get closer to the tree. It takes you
seconds to realise that you are in the actual heaven.");
                      print("You start looking for clues.");

                      while(rightAnswer==0)
                     {
                      answer= inputString("You see something behind the
tree. Do you want to take a look?");
                      answer = answer.toLowerCase();
                      if( answer.equals("yes") )
                        {
                            rightAnswer=1;
                            intermediateScore=intermediateScore+ 10;
                            print("You found an "+ getObject(t4) +"!");
                            print("Your score is: "+ intermediateScore);

                       } else if ( answer.equals("no") )
                       {
                         rightAnswer=1;
                         print("Keep looking.");
                       } else print("Wrong answer, input yes or no.");
                     }

                       rightAnswer=0;
                        while(rightAnswer==0)
                     {
                       answer= inputString("You see something far in the
distance . Do you want to take a look?");
                       answer= answer.toLowerCase();
                      if( answer.equals("yes") )
```

```
                        {
                            rightAnswer=1;
                            intermediateScore+=5;
                            print(" You found another "+ getObject(t4));
                        } else if ( answer.equals("no"))
                        {
                            rightAnswer=1;
                            print("Keep looking.");
                        } else print("Wrong answer, input yes or no.");
                    }
                    print("You can feel the clouds moving underneath
you.You activated the " + getTraps(t4) +
                    " trap.You can save yourself based on your previous
actions.");

                    if( intermediateScore >= 5 ) // Save the user based
on points
                        {
                            print("You succesfully save yourself from
ghosts. Well done.");
                            intermediateScore+=5;
                         } else
                         {
                            print("Phew! That was close! You got hit by one
ghost but it didn't get possessed! You are still alive.");
                         }
                    if( intermediateScore < 15 )
                        {
                            print("Oh no!You don't have enough points to
leave the room. ");
                        } else
                        {
                           ct=1;
                           exit=false;
                        }
                  } else if (answer.equals("B"))
                {
                            intermediateScore = 0;
                     // If the user's input is  B then we execute the
following blocks:
                        print("You get closer to the tree. It takes you
seconds to realise that you are in the actual heaven.");
                        print("You start looking for clues.");
                        answer= inputString("You see something after the
waterfall but you have to get through it to get there. Do you still want to
take a look?");
                        answer= answer.toLowerCase();
                        if( answer.equals("yes") )
                        {
                          intermediateScore+=10;
                          print("You found an "+ getObject(t4)+" !");
                        } else
                        {
                          print("Keep looking.");
                        }
                        answer= inputString("You see something under a
slippery rock. Do you want to take a look?");
                        answer= answer.toLowerCase();
                        if( answer.equals("yes") )
                        {
                          intermediateScore+=5;
```

```
                            print("You found another "+ getObject(t4));

                          } else
                          {
                            print("Keep looking.");
                          }
                            print("You can feel the clouds moving
underneath you.You activated the " + getTraps(t4) +
                        " trap.You can save yourself based on your previous
actions.");

                          if( intermediateScore >= 5 ) // Save the user
based on points
                          {
                            print("You succesfully saved yourself from
being hit. Well done.");
                            intermediateScore+=5;
                          } else
                          {
                            print("Phew! That was close! You failed to
protect yourself but you'll survive");

                          if( intermediateScore <= 15 )
                          {
                            print("Oh no!You don't have enough points to
leave the room. Try again or choose another letter.");
                          } else
                            {
                               ct=1;
                               exit=false;
                            }
                     }

                   }
                   int s= score+ intermediateScore;
              System.out.println("Your current score in this room is: " + s);

                 }
        }
        return intermediateScore;
      }

      public static int Room5 (int score, Castle room5, Traps t5)
      {
       int intermediateScore=0;
       print("Your score is: "+ score);
       print("You entered Hell On Earth.");
       print("HINT: Look for misterious objects to find the next clue.");
       boolean exit=true;
        while( exit ) // exits the while loop when the player has enough
points
        {
              int ct=0;
              while ( ct==0) // repeats code while the user has enough points
              {   String answer= inputString("You can check for clues: A.
under a pile of rocks, B. under a mermaid bridge. Type in the letter of
your choice:  ");
                  intermediateScore=0;
                  answer = answer.toUpperCase();
                  if (answer.equals("A") )
                  {
```

```
                    print("You get closer to the left rocks. It takes you
seconds to adjust your eyes in the water then you start looking around.");
                    print("You start looking for clues.");
                    answer= inputString("You see something white and
shiny between rocks. Do you want to take a look?");
                    answer = answer.toLowerCase();
                    if( answer.equals("yes") )
                      {
                          intermediateScore=intermediateScore+ 10;
                          print("You found a magical "+
getObject(t5)+"!");
                          print("Your score is: "+ intermediateScore);

                       } else
                       {
                          print("Keep looking.");
                       }
                     answer= inputString("You see something far in the
distance . Do you want to take a look?");
                     answer= answer.toLowerCase();
                    if( answer.equals("yes") )
                      {
                         intermediateScore+=5;
                         print(" You found an encripted message. ");
                      } else if ( answer.equals("no"))
                      {
                          print("Keep looking.");
                      } else print("Wrong answer, input the write
letter.");

                    print("You can feel the sand moving underneath
you.You activated the " + getTraps(t5) +
                    " trap.You can save yourself based on your previous
actions.");

                    if( intermediateScore >= 5 ) // Save the user based
on points
                      {
                          print("You succesfully save yourself from being
hit by arrows. Well done.");
                          intermediateScore+=5;
                       } else
                       {
                          print("Phew! That was close! You got hit by one
arrow but it wasn't poisonous! You are still alive.");
                       }
                    if( intermediateScore < 15 )
                      {
                          print("Oh no!You don't have enough points to
leave the room. ");
                      } else
                      {
                         ct=1;
                         exit=false;
                      }
                  } else if (answer.equals("B"))
                {
                          intermediateScore = 0;
                       // If the user's input is  B then we execute the
following blocks:
```

```
                        print("You get closer to the bridge. You start
looking around.");
                        print("You start looking for clues.");
                        answer= inputString("You see something that
appeared shiny in the sunlight. Do you want to take a look?");
                        answer= answer.toLowerCase();
                        if( answer.equals("yes") )
                        {
                          intermediateScore+=10;
                          print("You found a magical "+ getObject(t5)+"
!");
                        } else
                        {
                          print("Keep looking.");
                        }
                        answer= inputString("You see something under one
of the golden boxes. Do you want to take a look?");
                        answer= answer.toLowerCase();
                        if( answer.equals("yes") )
                        {
                          intermediateScore+=5;
                          print("There is a message written on a piece of
paper: USE THE KEY TO UNLOCK THE BOX OF THE UNKNOWN.");

                        } else
                        {
                          print("Keep looking.");
                        }
                          print("You can feel the sand moving underneath
you.You activated the " + getTraps(t5) +
                       " trap.You can save yourself based on your previous
actions.");

                        if( intermediateScore >= 5 ) // Save the user
based on points
                        {
                          print("You succesfully saved yourself from
being hit. Well done.");
                          intermediateScore+=5;
                        } else
                        {
                          print("Phew! That was close! You failed to
protect yourself. One arrow hit you but it was not poisonous. You'll
survive.");
                        }

                        if( intermediateScore <= 15 )
                        {
                          print("Oh no!You don't have enough points to
leave the room. Try again or choose another letter.");
                        } else
                          {
                             ct=1;
                             exit=false;
                          }
                  } else
                     {
                         intermediateScore=0;
                        print("You entered none of the letters above. Check
your spelling.");  // we execute this if the user entered a wrong letter
                     }
```

```
            }
            int s= score + intermediateScore;
          System.out.println("Your current score in this room is: "+ s);

    }
      return intermediateScore;
    }

    public static void updateRoom5 (Castle room5, boolean x) // changed
from false to true in main each time a new player enters
    {
      room5.explored = x;
    }
    public static boolean getExplored( Castle room5)
    {
      return room5.explored;
    }
    public static int CheckForNewRoom (int [] rooms, int ct, Castle room5 )
// The method checks each cell (room) whether it is already used (holds the
value 1) or not( value 0) and returns the room the user picked
    {
      System.out.println("CT: " + ct);
      String message= ("The available rooms are: ");
      int i;
      boolean g= getExplored(room5); // g= false because the room is not
checked yet
      for(i=1;i<6;i++)
      {
        if (i==5) // checking room 5
        {
          if( g = true){  // if room5 is unexplored
          message= (message + i + ", ");}
        } else
        if(rooms[i]==0)
        {
          message= (message + i + ", ");
        }
      }
      if(ct!=3) //  when the are other rooms left
      {
        message=(message + " Pick one of them:");
        print(message);
        return inputInt();
      } else return 0; // it returns 0 once all rooms were explored
    }

    public static void sort(int [] players ) // a method that contains a
sorting algorithm for each player score
    {
      int i, j;
      for( i=0;i <players.length;i++)
      {
        for ( j=i; j <players.length; j++) // starts from the next position
        {
              if (players[i] < players[j])
                 swap (players, i, j);
        }
      }
    }
```

```
    public static void swap (int [] players, int x, int y ) // method for
swaping the values of  2 array cells
    {
      int copy = players[y];
      players[y] = players[x];
      players[x] = copy;
    }

    public static void printTable (int [] copyPlayers, int [] players)
// Prints the final table with final scores
    {
      print("The scores are:");
      for(int i=0;i<players.length;i++) // going through the array's cells
      {
        int currentPoints= players[i];          // saving
        for(int j=0;i<copyPlayers.length;j++)   // going through the copy's
cells
        {
          if (copyPlayers[j]== currentPoints )
          {
            copyPlayers[j]=0;
            int copyPosition = j+1;
            print("Player "+ copyPosition + " got: " + currentPoints+ "
points.");
            break;
          }
        }
      }
    }

    public static int getRoomNumber (Traps x) // Accessor method that gets
the object which triggers the trap
    {
      return x.roomNumber;
    }

    public static String getObject (Traps x) // Accessor method that gets
the object which triggers the trap
    {
      return x.findObject;
    }

    public static String getTraps (Traps x)// Accessor method that gets the
name of the trap
    {
     return x.trapObject;
    }

    public static String inputString (String s) //Method for getting a
string from user
    {
        System.out.println(s);

        return new Scanner(System.in).nextLine();
      }

     public static int inputInt() // Method for getting an integer from
user
    {
      return new Scanner(System.in).nextInt();
```

```
    }

     public static void print( String s) // method for printing a message
    {
      System.out.println(s);
    }

}
```