Assignment #2 Code

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Problem #1

**import** java.util.\*;

**public** **class** problemone {

**public** **static** **void** main(String[] args){

// Great the user and inform them of the program purpose

System.*out*.println("Welcome to the username generator program!");

System.*out*.println("For the generator we will need some information from you");

// Initialize scanners and get information from user

Scanner first = **new** Scanner(System.*in*);

Scanner last = **new** Scanner(System.*in*);

System.*out*.print("Enter your first name:");

String First\_Name = first.next();

System.*out*.print("Enter your last name:");

String Last\_Name= last.next();

// generate the random number for the user name

Random rand = **new** Random();

**int** usernamerandom = rand.nextInt(90)+10;

// now use string mutations to get the username

System.*out*.println("Your User Name is: "+First\_Name.substring(0,1)+ Last\_Name.substring(0,5)+usernamerandom);

first.close();

last.close();

}

}

Problem #2

**import** java.util.\*;

**public** **class** problemtwo {

**public** **static** **void** main(String[] args){

// Great the user and explain the program

System.*out*.println("Welcome to the Heron's area calculator");

// generate scanners and prompt the user for the length

Scanner length = **new** Scanner(System.*in*);

System.*out*.print("Please enter the first side length: ");

**int** a = length.nextInt();

System.*out*.print("Please enter the second side length: ");

**int** b = length.nextInt();

System.*out*.print("Please enter the last side length: ");

**int** c = length.nextInt();

// take these sides and formulate the perimeter and area using the function given

**int** s = a+b+c;

**double** areasquared =(s\*(s-a)\*(s-b)\*(s-c));

**double** area = Math.*sqrt*(areasquared);

//display the area to the user

System.*out*.printf("The area is %.2f", area);

length.close();

}

}

Problem #3

**import** java.util.\*;

**public** **class** ProblemThree {

**public** **static** **void** main (String[] args){

// Great the user and inform them of the program features

System.*out*.println("Welcome to the angle function calculator!!");

System.*out*.println("Today I will generate a random number between 20 and 40");

System.*out*.println("Then I will show you the sine, cosine, and tangent values for that number.(in radians)");

// Generate random number and display it to the user

Random Rand = **new** Random();

**int** angle = Rand.nextInt(21) +20;

System.*out*.println("This is the random number for this run "+ angle);

// Calculate the sine cosine and tanget of that value

**double** cosine\_angle = Math.*cos*(angle);

**double** sine\_angle= Math.*sin*(angle);

**double** tangent\_angle =Math.*tan*(angle);

// display the values to the user

System.*out*.println("This is the sine of the angle "+ sine\_angle);

System.*out*.println("This is the Cosine of the angle "+ cosine\_angle);

System.*out*.println("This is the Tangent of the angle " + tangent\_angle);

}

}