**public class JavaBasics**

**{**

**//variables that can be used in this class**

**int age=16;**

**int height=180;**

**String name="bob";**

**String sex="m";**

**public void conditions(){**

**if (age==16){**

**System.out.println("You are 16");**

**}**

**if (age>=16){**

**System.out.println("You are 16 or older");**

**}**

**if (name.equals("bob") == true){**

**System.out.println("Name is bob");**

**}**

**if (age != 100){**

**System.out.println("You are not 100");**

**}**

**if ( (age>=13) && (age<=19) ){**

**System.out.println("You are a teenager");**

**}**

**if ( !(age>=16) ){**

**System.out.println("You are not old enough to drive yet!");**

**}**

**if ( (age>16) || (height>150) ){**

**System.out.println("You age OR height OR Both qualify you!");**

**}**

**if ( (age>16) && (height>150) && (name.equals("bob")==true) ){**

**System.out.println("You pass all three tests - come on in!");**

**}**

**if ( ((age>16) && (height>150)) || (height>200) ){**

**System.out.println("You can ride the roller coaster");**

**}**

**if (age>=65){**

**System.out.println("You are a senior");**

**}**

**else{**

**System.out.println("You are not a senior");**

**}**

**if (age>=65){**

**System.out.println("You are a senior");**

**}**

**else if(age>=18){**

**System.out.println("You are an adult");**

**}**

**if (age>=65){**

**System.out.println("You are a senior");**

**}**

**else if(age>=18){**

**System.out.println("You are an adult");**

**}**

**else{**

**System.out.println("You are a youth");**

**}**

**if(age>=18){**

**if(sex.equals("m") == true){**

**System.out.println("You are an adult male");**

**}**

**else{**

**System.out.println("You are an adult female");**

**}**

**}**

**else{**

**if(sex.equals("m") == true){**

**System.out.println("You are a male youth");**

**}**

**else{**

**System.out.println("You are a female youth");**

**}**

**}**

**}//end of conditions method**

**public void loops(){**

**UserInput UI = new UserInput();**

**int num1, num2, sum, temp;**

**String pw;**

**num1=1;**

**do{**

**System.out.println(num1);**

**num1 = num1 + 1;**

**}while(num1<10);**

**for (int k=1; k<10; k=k+1){**

**System.out.println(k);**

**}**

**num1=10;**

**do{**

**System.out.println(num1\*10);**

**num1 = num1 - 10;**

**}while(num1>0);**

**for(int k=10; k>0; k=k-10){**

**System.out.println(k\*10);**

**}**

**num1=50;**

**num2=70;**

**while(num1<num2){**

**System.out.println("num1 is " + num1 + " and num2 is " + num2);**

**num1 = num1 + 1;**

**num2 = num2 - 1;**

**}**

**num2=70;**

**for (num1=50; num1<num2; num1 = num1 + 1, num2 = num2 - 1){**

**System.out.println("num1 is " + num1 + " and num2 is " + num2);**

**}**

**num1=0;**

**do{**

**num1 = UI.getInteger("Enter a number LARGER than 100");**

**}while(num1<=100);**

**num1=0;**

**do{**

**num1 = UI.getInteger("Enter a number LARGER than 100");**

**}while( !(num1>100) );**

**do{**

**pw = UI.getString("Enter the pw! (hint: teacher's name)");**

**}while(pw.equals("janetka") == false);**

**num1=UI.getInteger("Enter a number between 10-20");**

**do{**

**System.out.println("num1 is going down... " + num1);**

**num1 = num1 - 1;**

**}while(num1>=0);**

**num1=UI.getInteger("Enter a number between 10-20");**

**for (int k=num1; k>=0; k=k-1){**

**System.out.println("num1 is going down... " + k);**

**}**

**num1=UI.getInteger("Enter a starting number");**

**num2=UI.getInteger("Enter an ending number");**

**int counter = num1;**

**while(counter<=num2){**

**System.out.println("Counting... " + counter);**

**counter = counter + 1;**

**}**

**sum = 0;**

**for (int k=1; k<=4; k=k+1){**

**num1 = UI.getInteger("Enter a number");**

**sum = sum + num1;**

**}**

**System.out.println("The sum of the numbers is " + sum);**

**sum = 0;**

**System.out.println("Please enter 4 numbers larger than 0");**

**for (int k=1; k<=4; k=k+1){**

**do{**

**num1 = UI.getInteger("Enter a number larger than 0");**

**if (num1<=0){**

**System.out.println("Sorry, that number doesn't count!");**

**}**

**}while(num1<=0);**

**sum = sum + num1;**

**}**

**System.out.println("The sum is " + sum);**

**}//end of loops**

**}//end of class**