

Digit extractor reflection log

I started off this code by defining my variable num, then I set up an object for num. This object will be used in my class. I used a while loop to ask the user each of their options. I also have 2 methods which convert every character that's in upper case into a lower case, since only lowercases will satisfy the code. Choice will be = to ' ' which allows them to input one of 4 letters w, o, t, h and q. I used a switch statement with the argument of choice since they have a choice of 5 inputs. In all 5 five of my cases each case is unique to the command the user will input, whether its asking for the integer or finding the ones place, tens place, hundreds place, or to quit the program these are all connected to the object and its constructor method. If a user inputs a incorrect value such as a character that isn't w o t h or q then the program will print out "Youve entered a incorrect choice please try again " ;

```
public static void main(String[] args) {
    // TODO Auto-generated method stub
    Scanner input = new Scanner(System.in);

    System.out.println("Please enter a integer: ");
    // declaring variables for place values
    int num = input.nextInt();

    // setting up object for num

    num placeV = new num(num);
    char choice = ' ';
    while(choice != 'q') {
        System.out.println("Show (W)hole number. ");
        System.out.println("Show (O)nes number. ");
        System.out.println("Show (T)ens number. ");
        System.out.println("Show (H)undreds number. ");
        System.out.println("(Q)uit. ");

        String choicestr = input.next().toLowerCase();
        choice = choicestr.charAt(0);
        //Start While loop to keep coming back to options until user inputs 0

        // when user chooses W O T H these following cases will occur
        switch(choice) {
            case 'w' : System.out.println("Your integer is: " + placeV.wholeNum()); break;

            case 'o' : System.out.println("Your ones place is: " + placeV.onesNum()); break;

            case 't' : System.out.println("Your tens place is: " + placeV.tensNum()); break;

            case 'h' : System.out.println("Your hundreds place is: " + placeV.hundsNum()); break;

            case 'q' : System.out.println("You have quit! ");

            // if user enters a incorrect amount
            default: System.out.println("Youve entered a incorrect choice please try again ");
        }
    }
}
```

```
}
```

I started off by creating a private int which only allows the object num to be access in this class, where num is = to a integer, then I created methods for every parameter, wholenum, onesnum, tensnum, and hundsnum within all of these methods they're calculating their place values and returning them for SYSTEM.OUT

```
public class num {  
// linking all values  
private int num;  
    public num(int integer) {  
        num = integer;  
    }  
    // TODO Auto-generated constructor stub  
  
    //method which returns number variable  
  
    public int wholeNum() {  
        return num;  
    }  
    public int onesNum() {  
        return num%10;  
    }  
    public int tensNum() {  
        return (num/10)%10;  
    }  
    public int hundsNum() {  
        return (num/100)%10;  
    }  
}
```