ME 318M Homework #3

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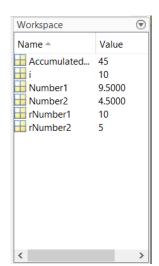
UT EID: jz24729

Section Number: 17460

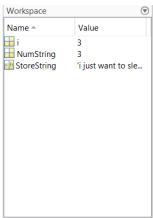## Problem 1:

```matlab
1    Number1 = input('Enter your first number: ');
2    Number2 = input('Enter your second number: ');
3    rNumber1 = round(Number1);
4    rNumber2 = round(Number2);
5
6    disp([num2str(Number1), ' will be rounded to ', num2str(rNumber1), ...
7        ' and ', num2str(Number2), ' will be rounded to ', num2str(rNumber2)])
8
9    AccumulatedSum = 0;
10
11   if rNumber1 <= rNumber2
12       for i = rNumber1:rNumber2
13           AccumulatedSum = AccumulatedSum + i;
14       end
15       disp(['Total sum of integers between ', num2str(rNumber1), ...
16           ' and ', num2str(rNumber2), ' is ', num2str(AccumulatedSum)])
17
18   else
19       for i = rNumber2:rNumber1
20           AccumulatedSum = AccumulatedSum + i;
21       end
22       disp(['Total sum of integers between ', num2str(rNumber2), ...
23           ' and ', num2str(rNumber1), ' is ', num2str(AccumulatedSum)])
24   end
```

```
>> HW3_Prob1
Enter your first number: 4.5
Enter your second number: 9.5
4.5 will be rounded to 5 and 9.5 will be rounded to 10
Total sum of integers between 5 and 10 is 45
>> HW3_Prob1
Enter your first number: 9.5
Enter your second number: 4.5
9.5 will be rounded to 10 and 4.5 will be rounded to 5
Total sum of integers between 5 and 10 is 45
```

Workspace	
Name ▲	Value
Accumulated...	45
i	10
Number1	9.5000
Number2	4.5000
rNumber1	10
rNumber2	5

Problem 2:

```matlab
1 -    NumString = input('How many strings do you want to enter? ');
2
3 -    for i = 1:NumString
4 -        StoreString = input(['Enter string number ', num2str(i), ': '], 's');
5 -        disp(['Your string number ', num2str(i), ' is ', StoreString])
6 -    end
```

```
How many strings do you want to enter? 3
Enter string number 1: HELLO
Your string number 1 is HELLO
Enter string number 2: IM TIRED
Your string number 2 is IM TIRED
Enter string number 3: i just want to sleep.
Your string number 3 is i just want to sleep.
```

Workspace	
Name ▲	Value
i	3
NumString	3
StoreString	'i just want to sle...

Problem 3:

```
1 -     NumInt = input('How many integers do you want to enter? ');
2
3 -   ┌ for i = 1:NumInt
4 -   │     UserInput = input(['This is loop number ', num2str(i), ' and you '...
5     │         'should enter your integer here: ']);
6 -   │     if UserInput ~= round(UserInput)
7 -   │         disp(['Hey that is not an integer -- I''m rounding it to ', ... ,
8     │             num2str(round(UserInput)), '!'])
9 -   │         disp('Press any key to continue.')
10 -  │         pause
11 -  │     end
12 -  │     disp(['Your integer number ', num2str(i), ' is ', num2str(round(UserInput))])
13 -  └ end
```

```
>> HW3_Prob3
How many integers do you want to enter? 5
This is loop number 1 and you should enter your integer here: 3
Your integer number 1 is 3
This is loop number 2 and you should enter your integer here: 6.7
Hey that is not an integer -- I'm rounding it to 7!
Press any key to continue.
Your integer number 2 is 7
This is loop number 3 and you should enter your integer here: 4.1
Hey that is not an integer -- I'm rounding it to 4!
Press any key to continue.
Your integer number 3 is 4
This is loop number 4 and you should enter your integer here: 300
Your integer number 4 is 300
This is loop number 5 and you should enter your integer here: 532.321
Hey that is not an integer -- I'm rounding it to 532!
Press any key to continue.
Your integer number 5 is 532
```

Workspace	
Name ▲	Value
i	5
NumInt	5
UserInput	532.3210