Loop Worksheet Answers

Disclaimer: the code presented here is not the only true solution. The best way to see if your solution works is to put it into a JAVA file and run it on some results! We are always willing to check over your answer and talk with you about your logic!

Question 1

Output:
8
8
8
8
8
8
end

Question 2

Output:
4,12
5,11
6,10
7,9
8,8
end

Question 3

Output:
y: 5, result: 2
y: 4, result: 4
y: 3, result: 8
y: 2, result: 16
y: 1, result: 32
y: 0, result: 64
End

The variables once outside of the loop
y = -1
x = 2
result = 64
Question 4

```java
for(int i = 0; i < str.length - 1; i++){
    System.out.println(str.toUpperCase().charAt(i));
}
```

Notice that `i < str.length - 1` makes it so that we leave off the last character! How else could you write this?

```
(i <= str.length - 2)
```

Question 5

```java
int i = 0;
while( i < str.length - 1){
    System.out.println(str.toUpperCase().charAt(i));
    i++;  
}
```

Question 6

```java
for(int i = -10000; i >= -30000; i-=5000){
    System.out.println(i);
}
```

Notice how the variable in the for loop can start anywhere, and anywhere, and be incremented by any amount!

Question 7

```java
Scanner input = new Scanner(System.in);
do{
    System.out.print("Enter a command: ");
    while(!input.nextLine().equalsIgnoreCase("exit"));
```