



2. Write the following for-loops as while loops

(a)

```
int y;  
  
for(y = 5; y < 10; y+=2)  
{  
    System.out.println(y);  
}
```

(b)

```
for(int z = 10; z > 0; z--){  
    System.out.println(z);  
}
```

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3. What is the output for each code segment below,

(a)

```
int m = 0;
int j = 0;

do{
    j *= -1;
    if(j >= 0){
        m += 2;
    }
    j+=2;
}while(m < 4);

System.out.println(j);
```

(b)

```
int i = 5, j = 0;
do{
    for(j = 0; j < i; j++){
        System.out.print("*");
    }
    System.out.println();
    i--;
}while(i > 0);
```

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4. The Magic 8 Ball is a plastic sphere resembling an 8-ball. Inside is a floating die with 20 faces. Each face has an affirmative, negative, or non-committal statement printed in raised letters. These messages are read through a window on the ball's bottom in response to a “yes” or “no” question. Finish the Magic8Ball class which simulates a Magic 8 Ball. You simulator needs to produce messages for the first 2 cases only. Once the message is displayed, prompt the user if they would like to play again. If the user types “y”, the simulation will continue to run.

```
Public class CountHeads{
```

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

```
    }  
}
```

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