Name _____ Period_____

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1. Write the following for-loops as while loops

(a)

```
int y;

for(y = 5; y < 10; y+=2)
{

    System.out.println(y);

}
```

```
int y = 5;
while(y < 10){

    System.out.println(y);


    y+=2;
}
```

(b)

```
for(int z = 10; z > 0; z--){

    System.out.println(z);

}
```

```
int z = 10;
while(z > 0){

    System.out.println(z);


    z--;
}
```

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---

2. 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);
```

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(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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3. The `Decrypt` class below accepts a number from the user and then converts the number to its character representation. Each pair of numbers in the provided number represent the ascii equivalent of a character and therefore can be used to identify the corresponding symbol.

In the example below, each pair of numbers in `num` map to a different symbol as shown,

num	pairs					ascii equivalents of pairs				
8773846772	87	73	84	67	72	W	I	T	C	H

Write the `Decrypt` class below. The final string of characters should be stored in `String` called `result`,

```java
public class Decrypt{
    Run | Debug
    public static void main(String args[]){
        int num = Integer.parseInt(args[0]);
        String result = "";

        while(num > 0){
            char temp = (char)(num%100);
            result = temp + result;
            num /= 100;
        }

        System.out.println(result);
    }
}
```

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