

Trace the following code segments and predict the output. If a compile error exists, write "compile error". If a runtime error would result, write "runtime error".

1.

```
int i = 0;
for (i = 1; i < 5; i++)
    System.out.println(i + 1);
```

2.

```
int i = 0;
for (i = 10; i > 1; i -= 2)
    System.out.println(i);
```

3.

```
int num = 0;
int sum = 3;

while (num != -9 && sum < 100)
{
    num = value inputted by user;    // values 3, 2, 4, -9 will be inputted
    sum += num;
}
```

4.

```
int i = 0;
for (i = 100; i > 1; i++)
{
    System.out.println(i);
    if (i == 50)
        break;
}
```

5.

```
int i = 0;
for (i = 1; i < 5; i++)
    System.out.println(i + 1);
    i = i + 2;
```

6.

```
int i = 0;
for (i = 1; i < 5; i++)
    for (j = 1; j < 3; j++)
        System.out.println(i + j);
```