University of Nevada, Las Vegas Computer Science 302 Spring 2017

Assignment 7, due 8:30 AM, April 17, 2017

Name:_____

You are permitted to work in groups, get help from others, read books, and use the internet. But the handwriting on this document must be your own. You may attach extra sheets, using a stapler.

6. Find the asymptotic time complexity of each of the following code fragments.

(a)
```
for (i=1; i < n; i=2*i)
  for (j=1; j < i; j++)
     cout << "Hello world" << endl;
```

(b)
```
for (i=1; i < n; i=2*i)
  for (j=i; j < n; j++)
     cout << "Hello world" << endl;
```

(c)
```
for (i=2; i < n; i=i*i);
  for (j=1; j < i; j=2*j)
     cout << "Hello world" << endl;
```

(d)
```
for (i=2; i < n; i=i*i);
  for (j=i; j < n; j=2*j)
     cout << "Hello world" << endl;
```