CISS240: Introduction to Programming
Quiz q0305

Name: _____ Score: ____

Q1. The following code fragment has a repeating chunk of code that repeats 3 times:

```
int i = 1, j = 1;

j = j * i;
i = i + 1;

j = j * i;
i = i + 1; // CORRECTION

j = j * i;
i = i + 1; // CORRECTION
```

If the goal is to compute $1 \times 2 \times 3 \times \cdots \times 8$, how many times does the repeating chunk of code appear?
Answer:

Q2. What is the final value of `i` at the end of this code fragment?

```
int i = 0, j = 1;

i = i * 10 + j;
j = j + 1;

i = i * 10 + j;
j = j + 1;

i = i * 10 + j;
j = j + 1;

i = i * 10 + j;
j = j + 1;

i = i * 10 + j;
j = j + 1;

i = i * 10 + j;
```

```
j = j + 1;
```

Answer:

Q3. What is the final value of `k` at the end of this code fragment?

```
int i = 135792468, j = 1000000, k;

k = i / j % 10;
j = j / 10;

k = i / j % 10;
j = j / 10;

k = i / j % 10;
j = j / 10;

k = i / j % 10;
j = j / 10;

k = i / j % 10;
j = j / 10;

k = i / j % 10;
j = j / 10;
```

Answer:

Q4. What is the final value of `k` at the end of this code fragment?

```
int i = 135792468, j = 1, k = 0;

k = k * 10 + i / j % 10;
j = j * 10;

k = k * 10 + i / j % 10;
j = j * 10;

k = k * 10 + i / j % 10;
j = j * 10;

k = k * 10 + i / j % 10;
j = j * 10;
```

```
k = k * 10 + i / j % 10;
j = j * 10;

k = k * 10 + i / j % 10;
j = j * 10;
```

Answer:

Q5. What is the final value of `k` at the end of this code fragment?

```
int i = 135792468, j = 1, k = 0;

k = k + i / j % 10;
j = j * 10;

k = k + i / j % 10;
j = j * 10;

k = k + i / j % 10;
j = j * 10;

k = k + i / j % 10;
j = j * 10;

k = k + i / j % 10;
j = j * 10;

k = k + i / j % 10;
j = j * 10;
```

Answer: