

**EE 2905**

Dr. Johnson

**Homework 4**

1 – Provide the value of a,b,c after executing the following code snippets. 25pts  
evaluate each problem individually

with a = 3, b = 1, c = 5

```
if (a != 0)  
    b = 4;
```

```
else  
    c = 2;
```

a      b      c

--

with a = 3, b = 5, c = 3

```
if (c == 2)  
    b = 1;  
else  
    a = 2;
```

--

with a = 3, b = 0, c = 1

```
if (c == 0 || a && !b)  
    if (!c)  
        b = 1;  
    else  
        a = 5;
```

--

with a = 0, b = 0, c = 3

```
if (a || b || c)  
    b = 1;  
else  
    c = 5;
```

a      b      c

--

with a = 0, b = 0, c = 1

```
if (a)  
    if (b)  
        c = 2;  
    else  
        c = 3;  
else  
    c = 5;
```

--

with a = 0, b = 0, c = 5

```
if (c = b){  
    b++;  
    c--;  
}  
else  
    --c;
```

--

## 2 – Provide the final values after executing the following code snippets 25pts

```
x =1; y = 5; z = 1;  
switch(x){  
    case 0: x = 4;  
              y = 3;  
    case 1: x = 3;  
    default: y = 5;  
              z = 2;  
}
```

x	y	z
---	---	---

--

```
x =0; y = 3; z = 1;  
switch(x){  
    case 0: x = 4;  
              y = 2;  
    case 1: x = 3;  
              z = 7;  
              break;  
    default: y = 5;  
              z = 2;  
}
```

x	y	z
---	---	---

--

```
x =4; y = 3; z = 1;  
switch(x){  
    case 0: x = 4;  
              y = 3;  
              break;  
    case 1: x = 3;  
              break;  
    default: y = 5;  
              z = 2;  
              break;  
}
```

x	y	z
---	---	---

--

### 3 – Provide the values after executing the following code snippets - each snippet is evaluated independently 25pts

given:

```
int j = 0;  
int k = 0;  
int val=2;
```

---

```
while(val){  
    j += 1;  
    val --;  
}
```

j =

```
while(j <= 5){  
    val++;  
    j++;  
}
```

val =

```
while(val = 2){  
    val++;  
    j++;  
}
```

val =

```
while(val + 2 < 5){  
    ++val;  
}
```

val =

```
j = 6;  
k = 0;  
while(j != k){  
    val += --j * k++;  
}
```

val =

4 – Provide the values after executing the following code snippets - each snippet is evaluated independently 25pts

given:

```
int val = 2;
```

```
int j;
```

```
int k;
```

---

```
for(j = 0; j < 6; j++)  
    val = 2 * j;
```

val =

```
for(j = 0; j < 4; j++)  
    val += 5;
```

```
for(j = 3; j >= 0; j--)  
    val -= 5 - j;
```

```
for(j = 0; j < 5; j++)  
    for(k = 0; k < 5; k++)  
        val += 1;
```

```
for(j = 0; j < 5; j++)  
    for(k = 5; k > 0; k--)  
        val += j + k;
```