

COMPILER DESIGN LAB

WEEK 6 (21.1.19) - EXERCISE

SET A

1. Write a lex program to convert the following while statement to for statement.

```
while(condition) {  
    statement(s);  
}
```

Input:

```
x = 0;  
while (x < 3) {  
    print x;  
    x = x + 1;  
}
```

2. Convert the given switch case statement to else if statement.

```
switch (expression)  
{  
    case value1:  
        statement1;  
        break;  
    case value2:  
        statement2;  
        break;  
    default:  
        statementDefault;  
}
```

3. Write a lex program to convert the following nested for loop statement to nested do-while statement.

Input:

```
for ( init; condition; increment ) {  
    for ( init; condition; increment ) {  
        statement(s);  
    }  
    statement(s);  
}
```

COMPILER DESIGN LAB

WEEK 6 (21.1.19) - EXERCISE

SET B

1. Write a lex program to convert the following for statement to do-while statement.

```
for (<initial statement(s)>; <Condition expression>; <Repeat step(s)>)
{
    <Loop statement(s)>;
}
```

2. Convert the given if-else statement to switch case.

```
if (condition)
    statement;
else if (condition)
    statement;
.
.
else
    statement;
```

3. Write a lex program to convert the following nested do while statement to nested for loop statement.

Input:

```
do {
    statement(s);

    do {
        statement(s);
    }while( condition );

}while( condition );
```