

CS 10044, Summer II

Selection/Looping Review

Solution

1) For loop

```
for (int i = 0; i <= 20; i++)  
{  
    cout << i << endl;  
}
```

Count controlled while loop

```
int Num = 0;  
  
while (Num <= 20)  
{  
    cout << Num;  
    Num++;  
}
```

Event controlled while loop

```
int Num = 0;  
bool NotDone = true;  
  
while (NotDone)  
{  
    cout << Num;  
    Num++;  
    NotDone = (Num <= 20);  
}
```

2) If statement

```
inFile.get(ch);

while (inFile)
{
    TotalChars++;

    if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u')
    {
        NumVowels++;
    }
    else if (ch == ' ')
    {
        NumSpaces++;
    }
    else if (ch == '\n')
    {
        NumNewlines++;
    }

    inFile.get(ch);
}
```

Switch statement

```
inFile.get(ch);

while (inFile)
{
    TotalChars++;

    switch (ch) {
        case 'a':
        case 'e':
        case 'i':
        case 'o':
        case 'u':
            NumVowels++;
            break;

        case ' ':
            NumSpaces++;
            break;

        case '\n':
            NumNewlines++;
            break;

    }

    inFile.get(ch);
}
```