

# Computational Physics

## Project 4

02/05/2009

# Outline

## 1 Project 4

## Project 4 - Part 1a

```
# include <iostream.h>
using namespace std;

main() {
    int N = 1;

    while (++N > 0) {
        ...
    }
}
```

## Project 4 - Part 1b

```
# include <iostream.h>  
using namespace std;
```

```
main() {  
    float x = 1.0;  
    float y = 2.0;  
  
    while (y ...) {  
        ...  
        y = (1.0 + x) - 1.0  
    }  
}
```

# Bit Manipulation

```
# include <iostream.h>
```

```
main() {
```

```
    int thirdBit = (1 << 2);
```

```
    int i = 8;
```

```
    if ( (i & thirdBit) != 0 ) {
```

```
        cerr << endl << "Third bit true!";
```

```
    }
```

```
    else if ( (i & thirdBit) == 0 ) {
```

```
        cerr << endl << "Third Bit false!";
```

```
    }
```

```
}
```

① Shift Operator <<

② Bitwise Logical AND &