

# Lab instructions

## Introduction to Programming

ECS 102, 2018-19 Semester II, IISER Bhopal

- You will get help as you require on the following.

1. Use user ID and password both as “iiserb”.
2. Open a terminal window to enter commands.
3. Create a directory on your name using  
“mkdir firstname\_lastname” or “mkdir firstname” ...
  1. Type the programs in emacs/vi editor. The emacs editor will be good one if you don't already know vi editor.
  2. Compile C program: `gcc <filename.c> -o <filename.o>`
  3. Execute your program to get the output: `./filename.o`

# Sample C program: Print a string

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
    printf("Happy New Year!\n");
```

```
}
```

## Execution

```
gcc hello.c -o hell.o  
./hello.o
```

## Output

```
Happy New Year!
```

# Sample C program: Add

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
    int number;
```

```
    float amount;
```

```
    number = 100;
```

```
    amount = 30.75 + 75.35;
```

```
    printf("number: %d\n", number);
```

```
    printf("amount: %5.2f\n", amount);
```

```
}
```

## Execution

- gcc add.c -o add.o
- ./add.o

## Output

number: 100

amount: 106.10

# Sample C program: Celsius to Fahrenheit

```
#include <stdio.h>
```

```
void main()
```

```
{
```

```
    float c = 15.5;
```

```
    float f;
```

```
    f = 9*c/5 + 32;
```

```
    printf("Celsius: %f,\nFahrenheit: %f\n", c, f);
```

```
}
```

## Execution

- gcc ctof.c -o ctof.o
- ./ctof.o

## Output

Celsius: 15.500000,  
Fahrenheit: 59.900002