

# Overview - Errors

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# Outline

## 1 Introduction

- Overview - Errors

# Ex1

```
main(void) {  
  
    int a, b, c;  
    int mean;  
  
    a = 40;  
    b = 50;  
    c = 60;  
  
    mean = (a+b+c) / 3;  
  
    printf("a= %d \n", a);  
    printf("b= %d \n", b);  
    printf("c= %d \n", c);  
    printf("mean= %d \n", mean);  
  
}
```

```
gcc -Wall t.c  
t.c: In function ‘main’:  
t.c:13:3: warning: implicit declaration of  
function ‘printf’  
[-Wimplicit-function-declaration]  
    printf("a= %d \n", a);  
           ^  
t.c:13:3: warning: incompatible implicit  
declaration of built-in function ‘printf’  
t.c:13:3: note: include ‘<stdio.h>’ or  
provide a declaration of ‘printf’
```

## Ex2

```
#include <stdio.h>

main(void) {
    int a, b, c;
    int mean;
    a = 40;
    b = 50;
    c = 60;
    mean = (a+b+c) / 3;

    printf("a= %d \n", a);
    printf("b= %d \n", b);
    printf("c= %d \n", c);
    printf("mean= %d \n", mean);

    gcc -Wall t.c
    t.c: In function ‘main’:
    t.c:18:3: error: expected declaration
    or statement *at end of input*
        printf("mean= %d \n", mean);
               ^
}
```

# Ex3

```
#include <stdio.h>

main(void) {
    int a, b, c;
    int mean;
    a = 40;
    b = 50;
    c = 60;
    mean = (a+b+c) / 3
    printf("a= %d \n", a);
    printf("b= %d \n", b);
    printf("c= %d \n", c);
    printf("mean= %d \n", mean);
}
```

gcc -Wall t.c  
t.c: In function ‘main’:  
t.c:15:3: error: expected ‘;’  
before ‘printf’  
 printf("a= %d \n", a);  
 ^

## Ex4

```
#include <stdio.h>

main(void) {
    int a, b, c;
    a = 40;
    b = 50;
    c = 60;
    mean = (a+b+c) / 3;
    printf("a= %d \n", a);
    printf("b= %d \n", b);
    printf("c= %d \n", c);
    printf("mean= %d \n", mean);
}
```

t.c: In function ‘main’: t.c:12:3:  
error: ‘mean’ undeclared (first use in  
this function) mean = (a+b+c) / 3;  
^ t.c:12:3: note: each undeclared  
identifier is reported only once for  
each function it appears in

# Ex5

```
#include <stdio.h>

main(void) {
    int a, b, c;
    a = 40;
    b = 50;
    c = 60;

    mean = (a+b+c) / 3;

    printf("a= %d \n");
    printf(b);
    printf("c= %d \n", c);
    printf("mean= %d \n", mean);
}
```

```
gcc -Wall t.c
t.c: In function ‘main’:
t.c:15:10: warning: format ‘%d’ expects
a matching ‘int’ argument [-Wformat=]
    printf("a= %d \n");
                           ^
t.c:16:10: warning: passing argument 1
of ‘printf’ makes pointer from integer
without a cast [-Wint-conversion]
    printf(b);
                           ^
In file included from t.c:1:0:
/usr/include/stdio.h:362:12: note:
expected ‘const char * restrict’
but argument is of type ‘int’
    extern int printf
                           ^
(const char * __restrict __format, ...);
t.c:16:3: warning: format not a string
literal and no format arguments
[-Wformat-security]
    printf(b);
                           ^
```

## Ex6 - a

```
#include <stdio.h>

main(void) {
    int a, b, c;
    a = 40;
    b = 50;
    c = 60;
    mean = (a+b+c) / 3;
    printf("a= %d \n", a);
    printf("b= %d \n", b);
    printf("c= %d \n", c);
    printf("mean= %d \n", mean);
}
```

## Ex6 - b

```
gcc -Wall t.c
t.c: In function ‘main’:
t.c:16:10: warning: missing terminating " character
    printf("b= %d \n, b);
           ^
t.c:16:3: error: missing terminating " character
    printf("b= %d \n, b);
           ^
t.c:17:24: error: expected ')' before ';' token
    printf("c= %d \n", c);
           ^
t.c:17:3: warning: passing argument 1 of ‘printf’ makes pointer from integer
without a cast [-Wint-conversion]
    printf("c= %d \n", c);
           ^
In file included from t.c:1:0:
/usr/include/stdio.h:362:12: note: expected ‘const char * restrict’ but
argument is of type ‘int’
extern int printf (const char * __restrict __format, ...);
           ^
t.c:20:1: warning: format not a string literal and no format arguments
[-Wformat-security]
}
^
```