

Command Line Arguments

CSE 101

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C/C++ Command Line Arguments

- When executing a program in either C or C++ there is a way to pass command line arguments.
- Passed as character arrays.
- Each parameter separated by a space
- Comes into the program as two arguments
 - argc – Number of parameters
 - argv – Parameter list

Command Line Arguments

```
#include <stdio.h>

int main(int c, char *v[])
{
    for (int i=0; i< c; i++)
        printf("This is Argument number #%d -> %s\n", v[i]);
    return 0;
}
```

Sample Output

```
dhakarPola>hello Each word should be a  
unique argument
```

- This is Argument number #0 -->hello
- This is Argument number #1 -->Each
- This is Argument number #2 -->word
- This is Argument number #3 -->should
- This is Argument number #4 -->be
- This is Argument number #5 -->a
- This is Argument number #6 -->unique
- This is Argument number #7 -->argument

Command Line Arguments

Conventional rules:

- Arguments are always passed to `main( )`.
- There must be two
 - first is an integer
 - second char pointer to an array
- First argument (`argv[0]`) will always be the name of the calling program.
- `argc` will always be at least 1
- The first argument is always `argv[0]`
- The last argument is always `argv[argc-1]`
- `argv[argc]` will always be a null pointer
- Arguments are always passed as character strings. Numbers must be converted from characters to integers, floats, doubles, etc.