ShreeSoft
INFORMATICS
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Command Line Argument

The predefined arguments passed from command line are called command line arguments. These arguments are passed to main() function. It is mostly used when you need to control your program from outside.

Syntax: int main(int argc, char *argv[])

The argc counts the number of arguments on the command line and argv[ ] is a pointer array which holds pointers of type char which points to the arguments passed to the program.

String to Primitive Datatype Conversion

1) atof() – It converts a string to a floating-point number (double). The atof function skips all white-space characters at the beginning of the string, converts the subsequent characters as part of the number, and then stops when it encounters the first character that isn't a number.

Syntax: double atof(const char *s);

Example:

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
int main ()
{
  float value;
  char str[20];
  strcpy(str, "12345678");
  value = atof(str);
  printf("\nString = %s, Float value = %f", str, value);

  strcpy(str, "ShreeSoft");
  value = atof(str);
  printf("\nString = %s, Float value = %f", str, value);
}
```

2) atoi(): It Converts String to integer(int). If no valid conversions can be made for the given string, it then returns zero.

Syntax: int atoi(const char *s);

Example:

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
int main ()
```

```
{
  int value;
  char str[20];
  strcpy(str, "16021987");
  value = atoi(str);
  printf("\nString = %s, int value = %d ", str, value);

  strcpy(str, "ShreeSoft");
  value = atoi(str);
  printf("\nString = %s, int value = %d ", str, value);
}
```

3) atol(): It converts String to long integer (long). If no valid conversions can be made for the given
   string, it then returns zero.

Syntax: long atol(const char *s)

Example:

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
int main () {
  long value;
  char str[20];
  strcpy(str, "1602198713");
  value = atol(str);
  printf("\nString value = %s, Long value = %ld", str, value);

  strcpy(str, "ShreeSoft");
  value = atol(str);
  printf("\nString value = %s, Long value = %ld", str, value);
  return(0);
}
```