MSDscript

Generated by Doxygen 1.9.6

1 MSDScript	1
2 Hierarchical Index	3
2.1 Class Hierarchy	. 3
3 Class Index	5
3.1 Class List	. 5
4 File Index	7
4.1 File List	. 7
5 Class Documentation	9
5.1 Add Class Reference	. 9
5.1.1 Detailed Description	. 10
5.1.2 Member Function Documentation	. 10
5.1.2.1 equals()	. 10
5.1.2.2 has_variable()	. 11
5.1.2.3 interp()	. 11
5.1.2.4 pretty_print()	. 11
5.1.2.5 print()	. 11
5.1.2.6 subst()	. 12
5.2 Expr Class Reference	. 12
5.2.1 Detailed Description	. 13
5.2.2 Member Function Documentation	
5.2.2.1 equals()	. 13
5.2.2.2 has_variable()	
5.2.2.3 interp()	
5.2.2.4 pretty_print()	
5.2.2.5 print()	
5.2.2.6 subst()	
5.3 Mult Class Reference	
5.3.1 Detailed Description	
5.3.2 Member Function Documentation	
5.3.2.1 equals()	_
5.3.2.2 has_variable()	
5.3.2.3 interp()	
5.3.2.4 pretty_print()	
5.3.2.5 print()	
5.3.2.6 subst()	
5.4 Num Class Reference	
5.4.1 Detailed Description	
5.4.2 Member Function Documentation	_
5.4.2.1 equals()	_
5.4.2.2 has_variable()	
0.T.E.Z 1145_v4114016()	13

	5.4.2.3 interp()	19
	5.4.2.4 pretty_print()	20
	5.4.2.5 print()	20
	5.4.2.6 subst()	20
5.5 Va	ar Class Reference	21
	5.5.1 Detailed Description	22
	5.5.2 Member Function Documentation	22
	5.5.2.1 equals()	22
	5.5.2.2 has_variable()	22
	5.5.2.3 interp()	22
	5.5.2.4 pretty_print()	23
	5.5.2.5 print()	23
	5.5.2.6 subst()	23
6 File Do	cumentation	25
6.1 /U	Isers/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/cmdline.cpp	
	File Reference	25
	6.1.1 Detailed Description	25
	6.1.2 Function Documentation	25
	6.1.2.1 use_arguments()	25
	Isers/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/cmdline.hpp File Reference	26
	6.2.1 Detailed Description	26
	6.2.2 Function Documentation	26
	6.2.2.1 use_arguments()	26
6.3 cr	ndline.hpp	27
6.4	/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.cpp	
	File Reference	27
	6.4.1 Detailed Description	27
	/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.hpp File Reference	27
	6.5.1 Detailed Description	28
6.6 ex	крг.hpp	28
	Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/main.cpp File Reference	30
	6.7.1 Detailed Description	30
	Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/tests.cpp File Reference	30
		30
Index		31

Chapter 1

MSDScript

Author

Lakshay Santosh Kucheriya

Date

Feburary 7, 2023

2 MSDScript

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

Expr								 										 							12
Add																									ç
Mult																								 •	14
Num																								 •	18
Var .																								 	21

4 Hierarchical Index

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Add		
Expr	Derived Class from Expr for representing a expression involving addition	9
Mult	Base Class for representing a expression	12
Num	Derived Class from Expr for representing a expression involving addition	14
	Derived Class from Expr for representing a number	18
Var	Derived Class from Expr for representing a expression involving Variable	21

6 Class Index

Chapter 4

File Index

4.1 File List

Here is a list of all documented files with brief descriptions:

/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/cmdline.cpp	
Contains the code for identifiying the argument given ahead of running the executable on the	
command line is valid and if it is valid executes the command	25
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/cmdline.hpp	
Header file for cmdline.cpp file	26
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.cpp	
Contains expression class definition	27
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.hpp	
Header file for expr.cpp file	27
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/main.cpp	
Entry point for the project	30
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/tests.cpp	
All the tests for the methods present in this project	30

8 File Index

Chapter 5

Class Documentation

5.1 Add Class Reference

Derived Class from Expr for representing a expression involving addition.

```
#include <expr.hpp>
```

Inheritance diagram for Add:



Public Member Functions

Add (Expr *lhs, Expr *rhs)

Constructor.

bool equals (Expr *e)

Checks for the equality between the left hand side and the right hand side.

• int interp ()

This function interprets the value of the expression.

• bool has_variable ()

This function determines if the the expression consists of a variable or not.

• Expr * subst (std::string s, Expr *e)

This function substitutes the expression with the combination of sub-expressions if possible.

void print (std::ostream &out)

Prints the expression.

void pretty_print (std::ostream &out)

Prints the expression with more clarity.

Public Member Functions inherited from Expr

```
• virtual bool equals (Expr *e)=0
```

- virtual int interp ()=0
- virtual bool has variable ()=0
- virtual Expr * subst (std::string s, Expr *e)=0
- virtual void print (std::ostream &out)=0
- virtual void pretty_print (std::ostream &out)=0
- std::string to_string ()
- std::string to_pretty_string ()

Public Attributes

```
• Expr * Ihs
```

Left hand side Expression.

• **Expr** * **rhs**

Right hand side Expression.

5.1.1 Detailed Description

Derived Class from Expr for representing a expression involving addition.

5.1.2 Member Function Documentation

5.1.2.1 equals()

Checks for the equality between the left hand side and the right hand side.

Parameters



Returns

boolean value of LHS = RHS

Implements Expr.

5.1 Add Class Reference

5.1.2.2 has_variable()

```
bool Add::has_variable ( ) [virtual]
```

This function determines if the the expression consists of a variable or not.

Returns

boolean value for the expression has a variable or not

Implements Expr.

5.1.2.3 interp()

```
int Add::interp ( ) [virtual]
```

This function interprets the value of the expression.

Returns

integer value of the computed expression

Implements Expr.

5.1.2.4 pretty_print()

Prints the expression with more clarity.

Parameters

```
out out output stream
```

Implements Expr.

5.1.2.5 print()

```
void Add::print (
          std::ostream & out ) [virtual]
```

Prints the expression.

Parameters

out out output stream

Implements Expr.

5.1.2.6 subst()

```
Expr * Add::subst (  std::string \ s, \\  Expr * e \ ) \ [virtual]
```

This function substitutes the expression with the combination of sub-expressions if possible.

Parameters

s	first argument, string which can be replaced as a part of the expression
е	second argument, Expression

Returns

Expression which is modified if combination of sub expressions was possible

Implements Expr.

The documentation for this class was generated from the following files:

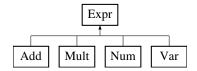
- /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.hpp
- /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.cpp

5.2 Expr Class Reference

Base Class for representing a expression.

```
#include <expr.hpp>
```

Inheritance diagram for Expr:



Public Member Functions

- virtual bool equals (Expr *e)=0
- virtual int interp ()=0
- virtual bool has variable ()=0
- virtual Expr * subst (std::string s, Expr *e)=0
- virtual void print (std::ostream &out)=0
- virtual void pretty_print (std::ostream &out)=0
- std::string to_string ()
- std::string to_pretty_string ()

5.2.1 Detailed Description

Base Class for representing a expression.

5.2.2 Member Function Documentation

5.2.2.1 equals()

Implemented in Num, Add, Mult, and Var.

5.2.2.2 has_variable()

```
virtual bool Expr::has_variable ( ) [pure virtual]
```

Implemented in Num, Add, Mult, and Var.

5.2.2.3 interp()

```
virtual int Expr::interp ( ) [pure virtual]
```

Implemented in Num, Add, Mult, and Var.

5.2.2.4 pretty_print()

Implemented in Num, Add, Mult, and Var.

5.2.2.5 print()

Implemented in Num, Add, Mult, and Var.

5.2.2.6 subst()

```
virtual Expr * Expr::subst ( std::string s, Expr * e) [pure virtual]
```

Implemented in Num, Add, Mult, and Var.

The documentation for this class was generated from the following file:

• /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.hpp

5.3 Mult Class Reference

Derived Class from Expr for representing a expression involving addition.

```
#include <expr.hpp>
```

Inheritance diagram for Mult:



5.3 Mult Class Reference 15

Public Member Functions

```
• Mult (Expr *lhs, Expr *rhs)
```

Constructor.

bool equals (Expr *e)

Checks for the equality between the left hand side and the right hand side.

• int interp ()

This function interprets the value of the expression.

• bool has_variable ()

This function determines if the the expression consists of a variable or not.

Expr * subst (std::string s, Expr *e)

This function substitutes the expression with the combination of sub-expressions if possible.

void print (std::ostream &out)

Prints the expression.

void pretty_print (std::ostream &out)

Prints the expression with more clarity.

Public Member Functions inherited from Expr

- virtual bool equals (Expr *e)=0
- virtual int interp ()=0
- virtual bool has variable ()=0
- virtual Expr * subst (std::string s, Expr *e)=0
- virtual void print (std::ostream &out)=0
- virtual void pretty_print (std::ostream &out)=0
- std::string to_string ()
- std::string to_pretty_string ()

Public Attributes

• Expr * Ihs

Left hand side Expression.

• **Expr** * **rhs**

Right hand side Expression.

5.3.1 Detailed Description

Derived Class from Expr for representing a expression involving addition.

5.3.2 Member Function Documentation

5.3.2.1 equals()

Checks for the equality between the left hand side and the right hand side.

Parameters

```
e Expression
```

Returns

boolean value of LHS = RHS

Implements Expr.

5.3.2.2 has_variable()

```
bool Mult::has_variable ( ) [virtual]
```

This function determines if the the expression consists of a variable or not.

Returns

boolean value for the expression has a variable or not

Implements Expr.

5.3.2.3 interp()

```
int Mult::interp ( ) [virtual]
```

This function interprets the value of the expression.

Returns

integer value of the computed expression

Implements Expr.

5.3.2.4 pretty_print()

```
void Mult::pretty_print (
          std::ostream & out ) [virtual]
```

Prints the expression with more clarity.

5.3 Mult Class Reference 17

Parameters

out	out	output stream
-----	-----	---------------

Implements Expr.

5.3.2.5 print()

```
void Mult::print (
          std::ostream & out ) [virtual]
```

Prints the expression.

Parameters

out <i>out</i>	output stream
----------------	---------------

Implements Expr.

5.3.2.6 subst()

This function substitutes the expression with the combination of sub-expressions if possible.

Parameters

s	first argument, string which can be replaced as a part of the expression
е	second argument, Expressiont

Returns

Expression which is modified if combination of sub expressions was possible

Implements Expr.

The documentation for this class was generated from the following files:

- /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.hpp
- /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.cpp

5.4 Num Class Reference

Derived Class from Expr for representing a number.

```
#include <expr.hpp>
```

Inheritance diagram for Num:



Public Member Functions

Num (int val)

Constructor.

bool equals (Expr *e)

Checks for the equality between the left hand side and the right hand side.

• int interp ()

This function interprets the value of the integer.

• bool has_variable ()

This function determines if the the expression consists of a variable or not.

• Expr * subst (std::string s, Expr *e)

This function substitutes the expression with the combination of sub-expressions if possible.

void print (std::ostream &out)

Prints the expression.

void pretty_print (std::ostream &out)

Prints the expression with more clarity.

Public Member Functions inherited from Expr

- virtual bool equals (Expr *e)=0
- virtual int interp ()=0
- virtual bool has_variable ()=0
- virtual Expr * subst (std::string s, Expr *e)=0
- virtual void print (std::ostream &out)=0
- virtual void pretty_print (std::ostream &out)=0
- std::string to_string ()
- std::string to_pretty_string ()

Public Attributes

• int val

Value of the number.

5.4 Num Class Reference 19

5.4.1 Detailed Description

Derived Class from Expr for representing a number.

5.4.2 Member Function Documentation

5.4.2.1 equals()

Checks for the equality between the left hand side and the right hand side.

Parameters

```
e Expression
```

Returns

boolean value of LHS = RHS

Implements Expr.

5.4.2.2 has_variable()

```
bool Num::has_variable ( ) [virtual]
```

This function determines if the the expression consists of a variable or not.

Returns

boolean value for the number has a variable or not

Implements Expr.

5.4.2.3 interp()

```
int Num::interp ( ) [virtual]
```

This function interprets the value of the integer.

Returns

integer value of the number

Implements Expr.

5.4.2.4 pretty_print()

Prints the expression with more clarity.

Parameters

out	out	output stream
-----	-----	---------------

Implements Expr.

5.4.2.5 print()

Prints the expression.

Parameters

out	out	output stream
-----	-----	---------------

Implements Expr.

5.4.2.6 subst()

```
Expr * Num::subst (  std::string \ s, \\  Expr * e ) \ [virtual]
```

This function substitutes the expression with the combination of sub-expressions if possible.

Parameters

s	first argument, string which can be replaced as a part of the express	
е	second argument, Expression	

Returns

Expression which is modified if combination of sub expressions was possible

Implements Expr.

The documentation for this class was generated from the following files:

5.5 Var Class Reference 21

- /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.hpp
- /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.cpp

5.5 Var Class Reference

Derived Class from Expr for representing a expression involving Variable.

```
#include <expr.hpp>
```

Inheritance diagram for Var:



Public Member Functions

• Var (std::string name)

Constructor.

bool equals (Expr *e)

Checks for the equality between the left hand side and the right hand side.

• int interp ()

This function interprets the value of the Variable.

bool has_variable ()

This function determines if the the expression consists of a variable or not.

Expr * subst (std::string s, Expr *e)

This function substitutes the expression with the combination of sub-expressions if possible.

· void print (std::ostream &out)

Prints the expression.

void pretty_print (std::ostream &out)

Prints the expression with more clarity.

Public Member Functions inherited from Expr

- virtual bool equals (Expr *e)=0
- virtual int interp ()=0
- virtual bool has_variable ()=0
- virtual Expr * subst (std::string s, Expr *e)=0
- virtual void print (std::ostream &out)=0
- virtual void pretty print (std::ostream &out)=0
- std::string to_string ()
- std::string to_pretty_string ()

Public Attributes

· std::string name

name of the variable

5.5.1 Detailed Description

Derived Class from Expr for representing a expression involving Variable.

5.5.2 Member Function Documentation

5.5.2.1 equals()

Checks for the equality between the left hand side and the right hand side.

Parameters

```
e Expression
```

Returns

boolean value of LHS = RHS

Implements Expr.

5.5.2.2 has_variable()

```
bool Var::has_variable ( ) [virtual]
```

This function determines if the the expression consists of a variable or not.

Returns

boolean value for the variable is a variable or not

Implements Expr.

5.5.2.3 interp()

```
int Var::interp ( ) [virtual]
```

This function interprets the value of the Variable.

Returns

error message as value of the variable cannot be iterpreted

Implements Expr.

5.5 Var Class Reference 23

5.5.2.4 pretty_print()

Prints the expression with more clarity.

Parameters

out	out	output stream
-----	-----	---------------

Implements Expr.

5.5.2.5 print()

Prints the expression.

Parameters

out out output stream	n
-----------------------	---

Implements Expr.

5.5.2.6 subst()

```
Expr * Var::subst (  std::string \ s, \\  Expr * e ) \ [virtual]
```

This function substitutes the expression with the combination of sub-expressions if possible.

Parameters

s	first argument, string which can be replaced as a part of the express	
е	second argument, Expressiont	

Returns

Expression which is modified if combination of sub expressions was possible

Implements Expr.

The documentation for this class was generated from the following files:

• /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/expr.hpp

 $\bullet \ / Users/lakshays anto shkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/expr.cpp \\$

Chapter 6

File Documentation

6.1 /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/ MSDScript/cmdline.cpp File Reference

Contains the code for identifying the argument given ahead of running the executable on the command line is valid and if it is valid executes the command.

```
#include "cmdline.hpp"
```

Functions

void use_arguments (int argc, char *argv[])
 Identifies the argument given ahead of running the executable.

6.1.1 Detailed Description

Contains the code for identifying the argument given ahead of running the executable on the command line is valid and if it is valid executes the command.

Author

Lakshay Santosh Kucheriya

6.1.2 Function Documentation

6.1.2.1 use_arguments()

```
void use_arguments (
          int argc,
          char * argv[] )
```

Identifies the argument given ahead of running the executable.

26 File Documentation

Parameters

argc	first parameter, stores the number of command line arguments passed by the us	
argv	second parameter, is array of character pointers listing all the arguments.	

6.2 /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/ MSDScript/cmdline.hpp File Reference

Header file for cmdline.cpp file.

```
#include "catch.h"
#include <stdio.h>
#include <iostream>
#include <string>
```

Functions

void use_arguments (int argc, char *argv[])
 Identifies the argument given ahead of running the executable.

6.2.1 Detailed Description

Header file for cmdline.cpp file.

Author

Lakshay Santosh Kucheriya

6.2.2 Function Documentation

6.2.2.1 use_arguments()

```
void use_arguments (
          int argc,
          char * argv[] )
```

Identifies the argument given ahead of running the executable.

Parameters

	argc	first parameter, stores the number of command line arguments passed by the user
ſ	argv	second parameter, is array of character pointers listing all the arguments.

6.3 cmdline.hpp 27

6.3 cmdline.hpp

Go to the documentation of this file.

```
00001 //
00002 //
          cmdline.hpp
00003 //
          MSDScript
00004 //
00005 // Created by Lakshay Santosh Kucheriya on 1/16/23.
00006 //
00007
00015 #ifndef cmdline_hpp
00016 #define cmdline_hpp
00018 #include "catch.h"
00019 #include <stdio.h>
00020 #include <iostream>
00021 #include <string>
00022
00023 void use_arguments(int argc, char* argv[]);
00025 #endif /* cmdline_hpp */
```

6.4 /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/← MSDScript/MSDScript/expr.cpp File Reference

Contains expression class definition.

```
#include "expr.hpp"
```

Functions

• operator_precedence pretty_print_at (Expr *e)

6.4.1 Detailed Description

Contains expression class definition.

Author

Lakshay Santosh Kucheriya

6.5 /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/← MSDScript/MSDScript/expr.hpp File Reference

Header file for expr.cpp file.

```
#include <stdio.h>
#include <string>
#include <iostream>
#include <stdexcept>
#include <sstream>
```

28 File Documentation

Classes

class Expr

Base Class for representing a expression.

· class Num

Derived Class from Expr for representing a number.

class Add

Derived Class from Expr for representing a expression involving addition.

· class Mult

Derived Class from Expr for representing a expression involving addition.

· class Var

Derived Class from Expr for representing a expression involving Variable.

Enumerations

• enum operator_precedence { precedence_none = 0 , precedence_add = 1 , precedence_mult = 2 } Enumeration for assigning the precedence of the operators.

Functions

operator_precedence pretty_print_at (Expr *e)

6.5.1 Detailed Description

Header file for expr.cpp file.

Author

Lakshay Santosh Kucheriya

6.6 expr.hpp

Go to the documentation of this file.

```
00001 //
00002 //
          expr.hpp
00003 //
          MSDScript
00004 //
00005 //
          Created by Lakshay Santosh Kucheriya on 1/23/23.
00006 //
00007
00015 #ifndef expr_hpp
00016 #define expr_hpp
00017
00018 #include <stdio.h>
00019 #include <string>
00020 #include <iostream>
00021 #include <stdexcept>
00022 #include <sstream>
00023
00024
00027 class Expr // Base class
00028 {
00029 public:
          virtual bool equals(Expr \stare) = 0 ; // This function checks for the equality for the LHS and the
00030
00031
          virtual int interp() = 0; // This function interprets the value of the expression/variable.
          virtual bool has_variable() = 0; // This function determines if the the expression consists of a
      variable or not.
```

6.6 expr.hpp 29

```
virtual Expr* subst(std::string s, Expr* e) = 0; // This function substitutes the expression with
     the combination of sub-expressions if possible.

virtual void print(std::ostream &out) = 0; // This function prints the expression.
00034
00035
         virtual void pretty_print(std::ostream &out) = 0; // This is an extenstion of the print function
     with minor changes.
00036
00037
          std::string to_string() {
00038
              std::stringstream st("");
00039
              this->print(st);
00040
              return st.str();
00041
          }
00042
00043
00044
          std::string to_pretty_string() {
00045
              std::stringstream st("");
00046
              this->pretty_print(st);
00047
              return st.str();
00048
          }
00049
00050 };
00051
00052
00055 class Num : public Expr
00056 {
00057 public:
00058
          int val;
00059
00060
          Num(int val);
00061
          bool equals(Expr *e) ;
00062
          int interp();
00063
          bool has_variable();
00064
          Expr* subst(std::string s, Expr* e) ;
00065
          void print(std::ostream &out);
00066
          void pretty_print(std::ostream &out);
00067 };
00068
00069
00072 class Add : public Expr
00073 {
00074 public:
00075
          Expr *lhs;
00076
          Expr *rhs;
00077
00078
          Add(Expr *lhs, Expr *rhs);
00079
          bool equals(Expr *e) ;
00080
          int interp();
00081
          bool has_variable();
00082
          Expr* subst(std::string s, Expr* e) ;
00083
          void print(std::ostream &out);
00084
          void pretty_print(std::ostream &out);
00085
00086 };
00087
00088
00091 class Mult : public Expr
00092 {
00093 public:
00094
          Expr *lhs;
00095
          Expr *rhs;
00096
00097
          Mult(Expr *lhs, Expr *rhs);
00098
          bool equals(Expr *e) ;
00099
          int interp();
00100
          bool has_variable();
00101
          Expr* subst(std::string s, Expr* e) ;
00102
          void print(std::ostream &out);
00103
          void pretty_print(std::ostream &out);
00104 };
00105
00109 class Var : public Expr
00110 {
00111 public:
00112
00113
            std::string name;
00114
            Var(std::string name);
00115
00116
            bool equals(Expr *e);
00117
            int interp();
            bool has_variable();
Expr* subst(std::string s, Expr* e);
00118
00119
            void print(std::ostream &out);
00121
            void pretty_print(std::ostream &out);
00122 };
00123
00124
00127 enum operator precedence {
```

30 File Documentation

6.7 /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/→ MSDScript/MSDScript/main.cpp File Reference

Entry point for the project.

```
#include <iostream>
#include "cmdline.hpp"
```

Functions

• int main (int argc, char **argv)

6.7.1 Detailed Description

Entry point for the project.

Author

Lakshay Santosh Kucheriya

6.8 /Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/← MSDScript/MSDScript/tests.cpp File Reference

contains all the tests forl the methods present in this project

```
#include "catch.h"
#include "expr.hpp"
#include <stdio.h>
```

Functions

- TEST_CASE ("equals")
- TEST_CASE ("Tests for checking interp")
- TEST_CASE ("Test for has_variable")
- TEST CASE ("Test for subst")
- TEST CASE ("to string")
- TEST_CASE ("to_pretty_string")

6.8.1 Detailed Description

contains all the tests forl the methods present in this project

Author

Lakshay Santosh Kucheriya

Index

```
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDSdtipt/MSDScript/MSDScript/cmdline.cpp,
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/MSDScript/cmdline.hpp,
                                                       Mult, 14
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDS@9498SDScript/MSDScript/expr.cpp,
                                                            has_variable, 16
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDSenipt/MSDScript/MSDScript/expr.hpp,
                                                            pretty_print, 16
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDS@fipt/MSDScript/msin.cpp,
                                                            subst, 17
/Users/lakshaysantoshkucheriya/Desktop/MSD/Courses/MSDScript/MSDScript/tests.cpp,
                                                            equals, 19
                                                            has_variable, 19
Add, 9
                                                            interp, 19
    equals, 10
    has_variable, 10
                                                            pretty_print, 19
                                                            print, 20
    interp, 11
                                                            subst, 20
    pretty print, 11
    print, 11
                                                       pretty_print
    subst, 12
                                                            Add, 11
                                                            Expr, 13
cmdline.cpp
                                                            Mult, 16
    use_arguments, 25
                                                           Num, 19
cmdline.hpp
                                                            Var, 22
    use_arguments, 26
                                                       print
equals
                                                            Add, 11
    Add, 10
                                                            Expr, 14
     Expr, 13
                                                            Mult, 17
    Mult, 15
                                                            Num, 20
    Num, 19
                                                            Var, 23
    Var, 22
Expr, 12
                                                       subst
                                                            Add, 12
    equals, 13
                                                           Expr, 14
    has_variable, 13
    interp, 13
                                                            Mult, 17
    pretty_print, 13
                                                            Num, 20
                                                            Var, 23
    print, 14
    subst, 14
                                                       use arguments
has variable
                                                            cmdline.cpp, 25
    Add, 10
                                                            cmdline.hpp, 26
    Expr, 13
                                                       Var. 21
    Mult, 16
                                                            equals, 22
    Num, 19
                                                            has variable, 22
    Var, 22
                                                            interp, 22
interp
                                                            pretty_print, 22
    Add, 11
                                                            print, 23
    Expr, 13
                                                            subst, 23
    Mult, 16
```