

ADT

0.1

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# Contents



# Chapter 1

## Hierarchical Index

### 1.1 Class Hierarchy

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

IRunnable . . . . .	??
Kolejka . . . . .	??
Lista . . . . .	??
ListaTest . . . . .	??
Pojemnik . . . . .	??
PojemnikWide . . . . .	??
Stoper . . . . .	??
ListaTest . . . . .	??
tabtest . . . . .	??
Stos . . . . .	??
tabdyn . . . . .	??
tabtest . . . . .	??



## Chapter 2

# Class Index

### 2.1 Class List

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

<a href="#">IRunnable</a>	.....	??
<a href="#">Kolejka</a>	.....	??
<a href="#">Lista</a>	.....	??
<a href="#">ListaTest</a>	.....	??
<a href="#">Pojemnik</a>	.....	??
<a href="#">PojemnikWide</a>	.....	??
<a href="#">Stoper</a>	.....	??
<a href="#">Stos</a>	.....	??
<a href="#">tabdyn</a>	.....	??
<a href="#">tabtest</a>	.....	??





## Chapter 3

# File Index

### 3.1 File List

Here is a list of all files with brief descriptions:

<a href="#">IRunnable.cpp</a>	Interfejs do testowania programow . . . . .	??
<a href="#">IRunnable.hh</a>	Interfejs do testowania programow . . . . .	??
<a href="#">Kolejka.cpp</a>	Definicja metod interface'u ADT- <a href="#">Kolejka</a> . . . . .	??
<a href="#">Kolejka.hh</a>	Interface abstrakcyjnego typu danych - <a href="#">Kolejka</a> . . . . .	??
<a href="#">Lista.cpp</a>	Definicja metod interface'u abstrakcyjnego typu danych - <a href="#">Lista</a> . . . . .	??
<a href="#">Lista.hh</a>	Interface abstrakcyjnego typu danych - <a href="#">Lista</a> . . . . .	??
<a href="#">ListaTest.cpp</a>	Definicja metod zwiazanych z "ListaTest" . . . . .	??
<a href="#">ListaTest.hh</a>	Definicja klasy odpowiedzialnej za testowanie "Listy" . . . . .	??
<a href="#">main.cpp</a>	. . . . .	??
<a href="#">Pojemnik.cpp</a>	Definicja metod pojedynczego elementu ADT ( <a href="#">Kolejka</a> , <a href="#">Stos</a> ) . . . . .	??
<a href="#">Pojemnik.hh</a>	Pełni role pojedynczego elementu ADT ( <a href="#">Kolejka</a> , <a href="#">Stos</a> ) . . . . .	??
<a href="#">PojemnikWide.cpp</a>	Definicje metod pojedynczego elementu ADT ( <a href="#">Lista</a> ) . . . . .	??
<a href="#">PojemnikWide.hh</a>	Pełni role pojedynczego elementu ADT ( <a href="#">Lista</a> ) . . . . .	??
<a href="#">Stoper.cpp</a>	. . . . .	??
<a href="#">Stoper.hh</a>	. . . . .	??
<a href="#">Stos.cpp</a>	Definicja metod interface'u ADT- <a href="#">Stos</a> . . . . .	??
<a href="#">Stos.hh</a>	Interface abstrakcyjnego typu danych - <a href="#">Stos</a> . . . . .	??
<a href="#">Tablica.cpp</a>	. . . . .	??
<a href="#">Tablica.hh</a>	. . . . .	??
<a href="#">TablicaTest.cpp</a>	. . . . .	??
<a href="#">TablicaTest.hh</a>	. . . . .	??



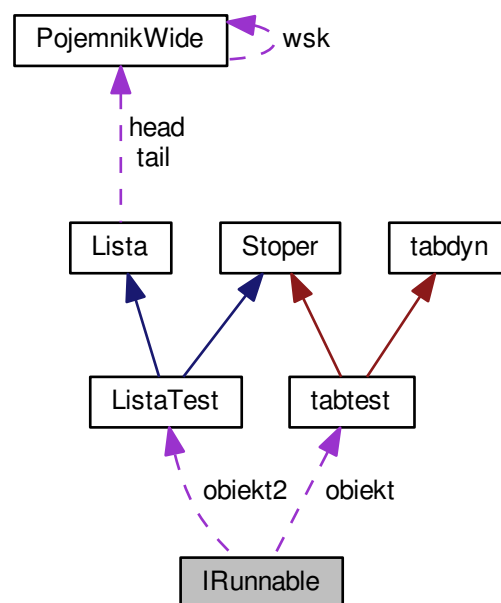
## Chapter 4

# Class Documentation

### 4.1 IRunnable Class Reference

```
#include <IRunnable.hh>
```

Collaboration diagram for IRunnable:



### Public Member Functions

- void [przygotuj](#) (int pilosc, int ppowtorzenia, char popcja)  
*przygotowanie do testu*
- void [run](#) ()
- void [przygotuj\\_szukajlista](#) (string pnazwapliku, string pszukane)  
*przygotowanie do testu przeszukiwania listy*

- int [run\\_szukajlista](#) ()

### Private Attributes

- [tabtest](#) obiekt
- int [ilosc](#) =10
- int [powtorzenia](#) =1
- char [opcja](#) ='1'
- [ListaTest](#) obiekt2
- string [nazwapliku](#)
- string [szukane](#)

### 4.1.1 Detailed Description

Definition at line 14 of file IRunnable.hh.

### 4.1.2 Member Function Documentation

#### 4.1.2.1 void IRunnable::przygotuj ( int *pilosc*, int *ppowtorzenia*, char *popcja* )

##### Parameters

in	<i>pilosc</i> -	ilosc lczb jaka ma byc zapisana do tablicy
in	<i>ppowtorzenia</i> -	ile razy ma byc wywolany algorytm, pomiar czasowy
in	<i>popcja</i> -	zmienna potrzebna do wyboru algorytmu (1. powiekszzanie tablicy o 1, 2. powiekszzanie tablczy o 10, 3. powiekszzanie tablicy 2 razy)

Definition at line 16 of file IRunnable.cpp.

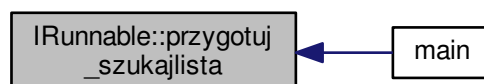
#### 4.1.2.2 void IRunnable::przygotuj\_szukajlista ( string *pnazwapliku*, string *pszukane* )

##### Parameters

in	<i>pnazwapliku</i> -	nazwa pliku, zktorego ma byc wczytany tekst i zapisany do listy
in	<i>szukane</i> -	szukane slowo

Definition at line 29 of file IRunnable.cpp.

Here is the caller graph for this function:



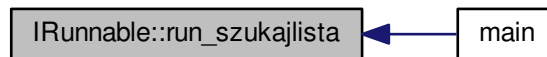
#### 4.1.2.3 void IRunnable::run ( ) [inline]

Definition at line 25 of file IRunnable.hh.

#### 4.1.2.4 int IRunnable::run\_szukajlista ( ) [inline]

Definition at line 28 of file IRunnable.hh.

Here is the caller graph for this function:



### 4.1.3 Member Data Documentation

#### 4.1.3.1 int IRunnable::ilosc =10 [private]

Definition at line 16 of file IRunnable.hh.

#### 4.1.3.2 string IRunnable::nazwapliku [private]

Definition at line 21 of file IRunnable.hh.

#### 4.1.3.3 tabtest IRunnable::obiekt [private]

Definition at line 15 of file IRunnable.hh.

#### 4.1.3.4 ListaTest IRunnable::obiekt2 [private]

Definition at line 20 of file IRunnable.hh.

#### 4.1.3.5 char IRunnable::opcja ='1' [private]

Definition at line 18 of file IRunnable.hh.

#### 4.1.3.6 int IRunnable::powtorzenia =1 [private]

Definition at line 17 of file IRunnable.hh.

#### 4.1.3.7 string IRunnable::szukane [private]

Definition at line 22 of file IRunnable.hh.

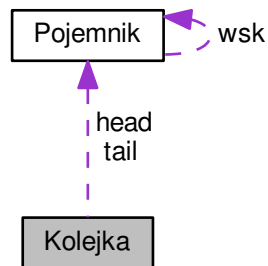
The documentation for this class was generated from the following files:

- [IRunnable.hh](#)
- [IRunnable.cpp](#)

## 4.2 Kolejka Class Reference

```
#include <Kolejka.hh>
```

Collaboration diagram for Kolejka:



### Public Member Functions

- void [Dodaj](#) (double elem)
- double [Zwroclusun](#) ()
- double [Wez](#) ()
- int [Rozmiar](#) ()
- bool [Czypusta](#) ()
- void [Oproznij](#) ()
- void [Wyswietl](#) ()

### Private Attributes

- [Pojemnik](#) \* [head](#) =NULL
- [Pojemnik](#) \* [tail](#) =NULL
- int [rozmiar](#) =0

#### 4.2.1 Detailed Description

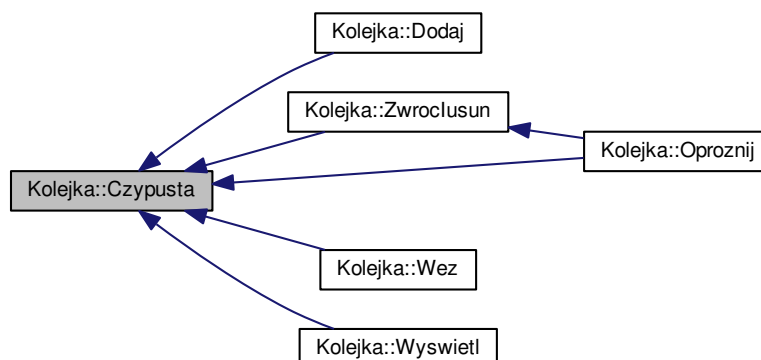
Definition at line 13 of file Kolejka.hh.

#### 4.2.2 Member Function Documentation

##### 4.2.2.1 bool Kolejka::Czypusta ( ) [inline]

Definition at line 22 of file Kolejka.hh.

Here is the caller graph for this function:



#### 4.2.2.2 void Kolejka::Dodaj ( double *elem* )

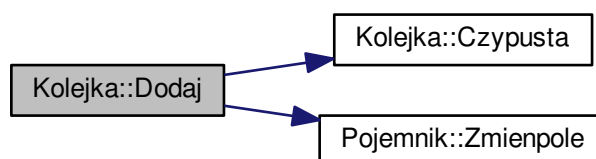
Dodaje element na koncu kolejki

Parameters

<i>in</i>	<i>elem</i>	zmienna do przechowania
-----------	-------------	-------------------------

Definition at line 13 of file Kolejka.cpp.

Here is the call graph for this function:

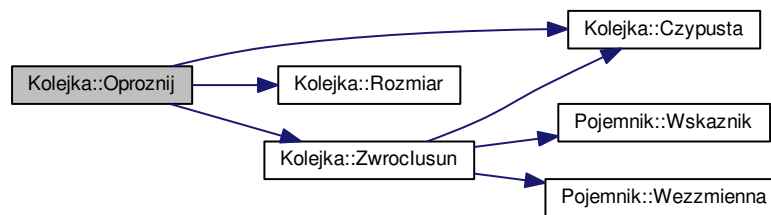


#### 4.2.2.3 void Kolejka::Oproznij ( )

Usuwa wszystkie elementy kolejki

Definition at line 73 of file Kolejka.cpp.

Here is the call graph for this function:



#### 4.2.2.4 `int Kolejka::Rozmiar ( ) [inline]`

Definition at line 21 of file `Kolejka.hh`.

Here is the caller graph for this function:

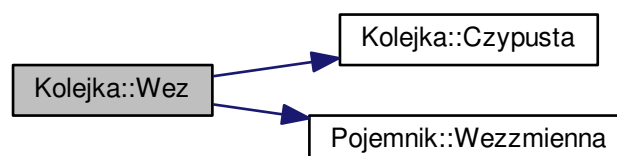


#### 4.2.2.5 `double Kolejka::Wez ( )`

Zwraca wartosc pierwszego elementu w kolejce. Funkcja NIE sluzzy do modyfikowania wartosci tego elementu

Definition at line 59 of file `Kolejka.cpp`.

Here is the call graph for this function:



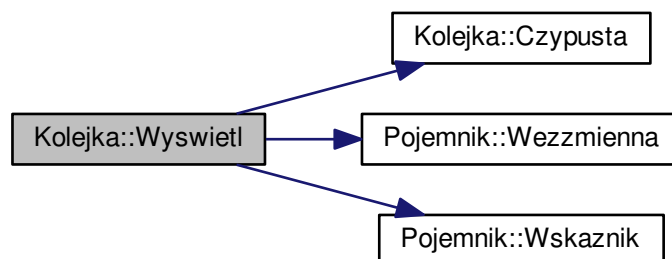


## 4.2.2.6 void Kolejka::Wyswietl ( )

Wyswietla wszystkie elementy kolejki od pierwszego do ostatniego

Definition at line 84 of file Kolejka.cpp.

Here is the call graph for this function:



## 4.2.2.7 double Kolejka::Zwroclusun ( )

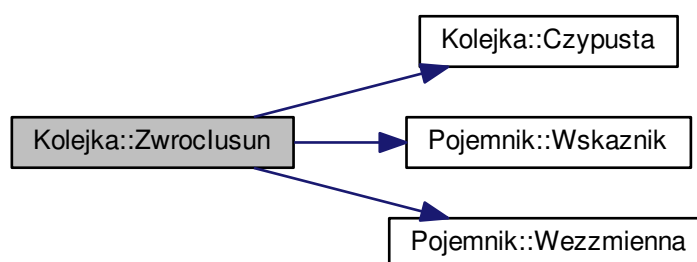
Usuwa element z poczatku kolejki i zwraca jego wartosc

Return values

<i>wartosc</i>	usunietego elementu
----------------	---------------------

Definition at line 37 of file Kolejka.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



### 4.2.3 Member Data Documentation

#### 4.2.3.1 `Pojemnik* Kolejka::head =NULL` [private]

Definition at line 14 of file `Kolejka.hh`.

#### 4.2.3.2 `int Kolejka::rozmiar =0` [private]

Definition at line 16 of file `Kolejka.hh`.

#### 4.2.3.3 `Pojemnik* Kolejka::tail =NULL` [private]

Definition at line 15 of file `Kolejka.hh`.

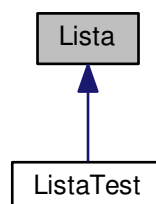
The documentation for this class was generated from the following files:

- [Kolejka.hh](#)
- [Kolejka.cpp](#)

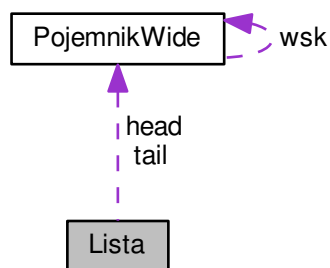
## 4.3 Lista Class Reference

```
#include <Lista.hh>
```

Inheritance diagram for `Lista`:



Collaboration diagram for Lista:



## Public Member Functions

- bool [Dodaj](#) (string elem, int ind)
- string [Usun](#) (int ind)
- string [Wez](#) (int ind)
- int [Rozmiar](#) ()
- bool [Czypusta](#) ()
- void [Oproznij](#) ()
- void [Wyswietl](#) ()
- int [Wyszukaj](#) (string szukane)

## Private Attributes

- [PojemnikWide](#) \* [head](#) =NULL
- [PojemnikWide](#) \* [tail](#) =NULL

### 4.3.1 Detailed Description

Definition at line 16 of file Lista.hh.

### 4.3.2 Member Function Documentation

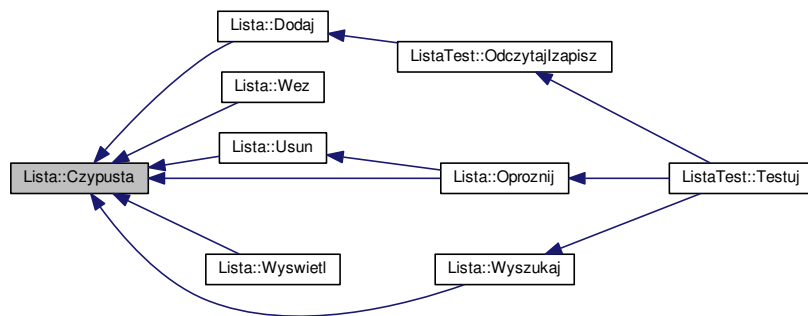
#### 4.3.2.1 bool Lista::Czypusta ( ) `[inline]`

Return values

<i>true</i> -	gdy lista jest pusta
<i>false</i> -	w przypadku przeciwnym

Definition at line 29 of file Lista.hh.

Here is the caller graph for this function:



#### 4.3.2.2 bool Lista::Dodaj ( string elem, int ind )

Funkcja przypisuje wartosc do przechowania elementowi typu "Pojemnik" i dodaje ten "Pojemnik" w DOWOLNYM miejscu listy czyli na koncu, poczatku badz wewnatrz listy

##### Parameters

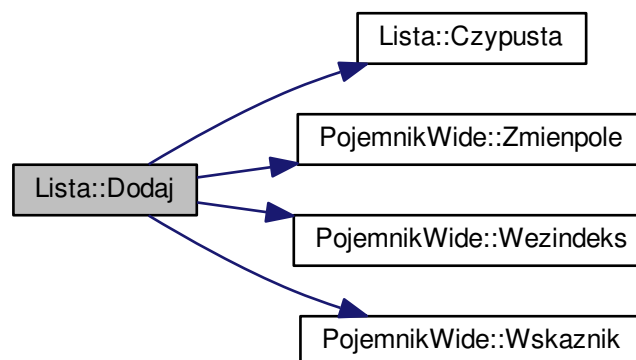
in	elem-	wartosc do przechowania
in	index-	indeks listy pod jakim bedzie przechowywany pojemnik ze zmienna

##### Return values

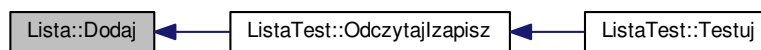
false-	gdy element ma byc wstawiony w nielogicznym miejscu, np-> wstawianie elementu o indeksie 100 kiedy lista ma aktualnie indeksy od 0 do 15
true-	gdy element wstawiono poprawnie do listy

Definition at line 24 of file Lista.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:

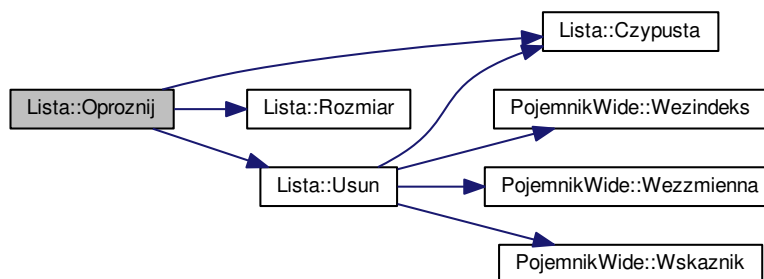


#### 4.3.2.3 void Lista::Oproznij ( )

Usuwa wszystkie elementy z listy

Definition at line 196 of file Lista.cpp.

Here is the call graph for this function:



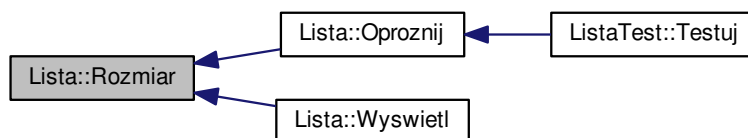
Here is the caller graph for this function:



#### 4.3.2.4 int Lista::Rozmiar ( ) [inline]

Definition at line 24 of file Lista.hh.

Here is the caller graph for this function:



#### 4.3.2.5 string Lista::Usun ( int *ind* )

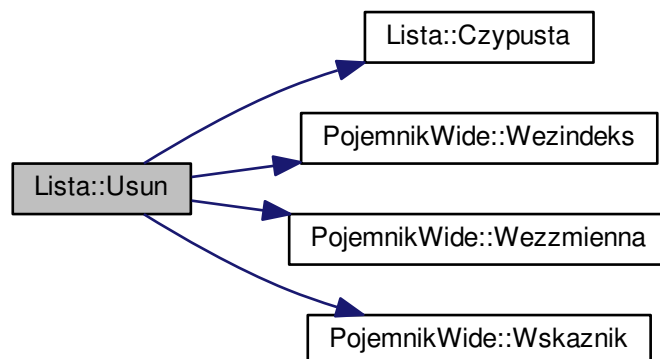
Usuwa element z Listy o zadany indeksie i zwraca wartosc, która przechowywał

##### Parameters

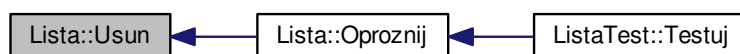
<code>in</code>	<code>ind</code>	indeks elementu, który ma zostać usunięty z listy
-----------------	------------------	---

Definition at line 115 of file Lista.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



4.3.2.6 `string Lista::Wez ( int ind )`

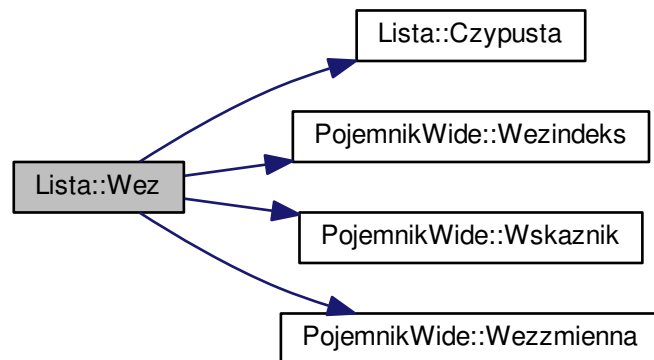
Zwraca wartość elementu o zadanym indeksie

## Parameters

<i>in</i>	<i>ind-</i>	indeks poszukiwanego elementu
-----------	-------------	-------------------------------

Definition at line 88 of file Lista.cpp.

Here is the call graph for this function:

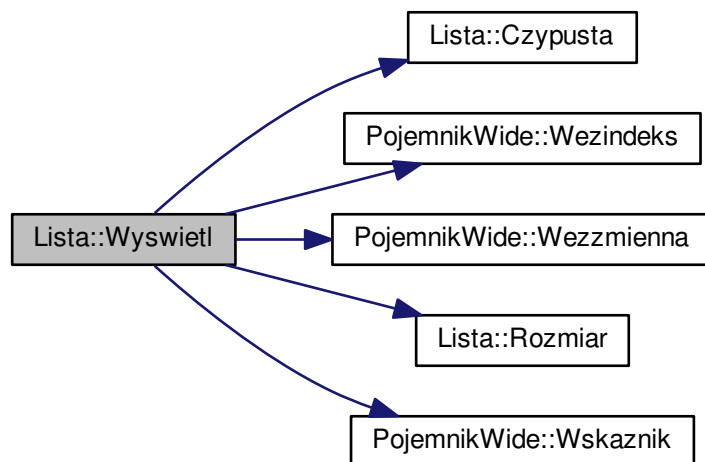


#### 4.3.2.7 void Lista::Wyswietl ( )

Wyswietla zawartosc listy na standardowe wyjscie

Definition at line 209 of file Lista.cpp.

Here is the call graph for this function:





4.3.2.8 `int Lista::Wyszukaj ( string szukane )`

Wyszukuje podany wyraz wsrod elementow listy

## Parameters

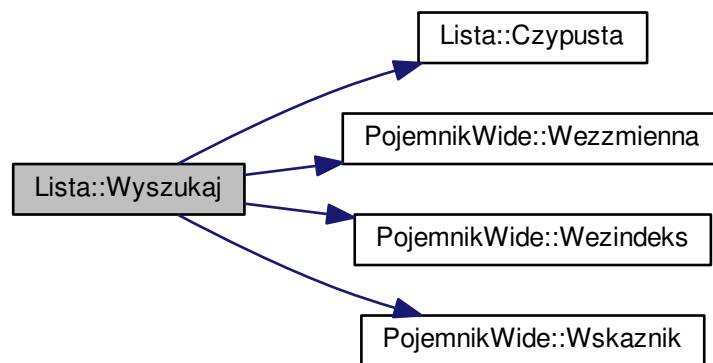
<code>in</code>	<code><i>szukane</i></code>	szukany wyraz
-----------------	-----------------------------	---------------

## Return values

<code>zwraca</code>	numer indeksu elementu, który przechowuje szukany wyraz lub -1 w przypadku jego nieznaalezienia
---------------------	---

Definition at line 235 of file Lista.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



## 4.3.3 Member Data Documentation

4.3.3.1 `PojemnikWide* Lista::head =NULL` [private]

Definition at line 17 of file Lista.hh.

4.3.3.2 `PojemnikWide* Lista::tail =NULL` [private]

Definition at line 18 of file Lista.hh.

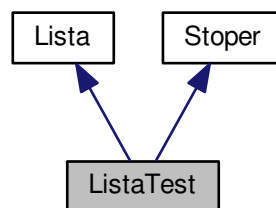
The documentation for this class was generated from the following files:

- [Lista.hh](#)
- [Lista.cpp](#)

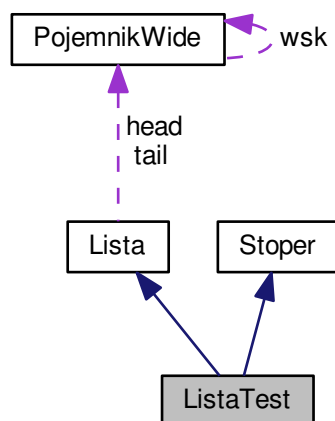
## 4.4 ListaTest Class Reference

```
#include <ListaTest.hh>
```

Inheritance diagram for ListaTest:



Collaboration diagram for ListaTest:



### Public Member Functions

- bool [OdczytajIzapisz](#) (string nazwapom)
- int [Testuj](#) (string nazwapliku, string szukane)

#### 4.4.1 Detailed Description

Definition at line 18 of file ListaTest.hh.

#### 4.4.2 Member Function Documentation

##### 4.4.2.1 bool ListaTest::OdczytajIzapisz ( string *nazwapom* )

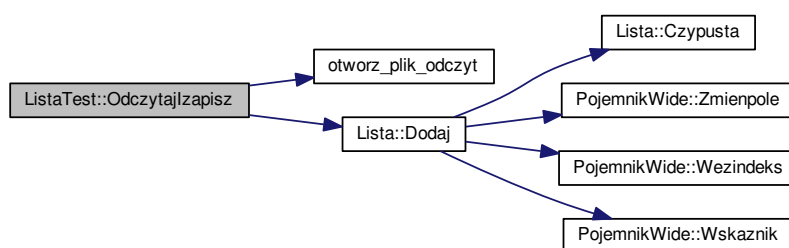
Funkcja odpowiedzialna za odczytanie danych z pliku i zapisanie ich w liscie

Parameters

in	<i>nazwapom</i> -	nazwa pliku, skad mamy odczytywac tekst
----	-------------------	---

Definition at line 35 of file ListaTest.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



##### 4.4.2.2 int ListaTest::Testuj ( string *nazwapliku*, string *szukane* )

Wczytuje dane z pliku, zapisuje do listy, mierzy czas wyszukiwania elementu i dopisuje go do pliku "czas.dat"

Parameters

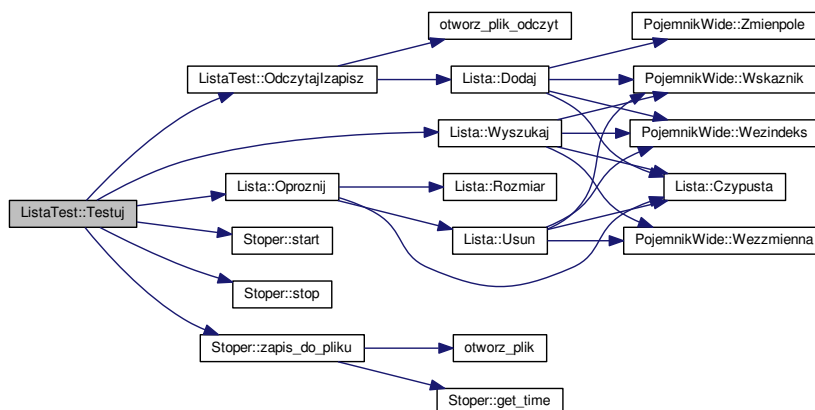
in	<i>nazwapliku</i> -	nazwa pliku z tekstem do zapisania
in	<i>szukane</i> -	szukane slowo

## Return values

<i>numer</i>	indeksu pod jakim znajdziemy szukane slowo w liscie lub -1 gdy slowo nie wystepuje w tekście
--------------	--

Definition at line 61 of file ListaTest.cpp.

Here is the call graph for this function:



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

- [ListaTest.hh](#)
- [ListaTest.cpp](#)

## 4.5 Pojemnik Class Reference

```
#include <Pojemnik.hh>
```

Collaboration diagram for Pojemnik:



### Public Member Functions

- void [Zmienpole](#) (double pom)
- double [Wezmienna](#) ()
- [Pojemnik](#) \* [Wskaznik](#) ()

## Public Attributes

- `Pojemnik * wsk = NULL`

## Private Attributes

- `double zmienna = 0`

### 4.5.1 Detailed Description

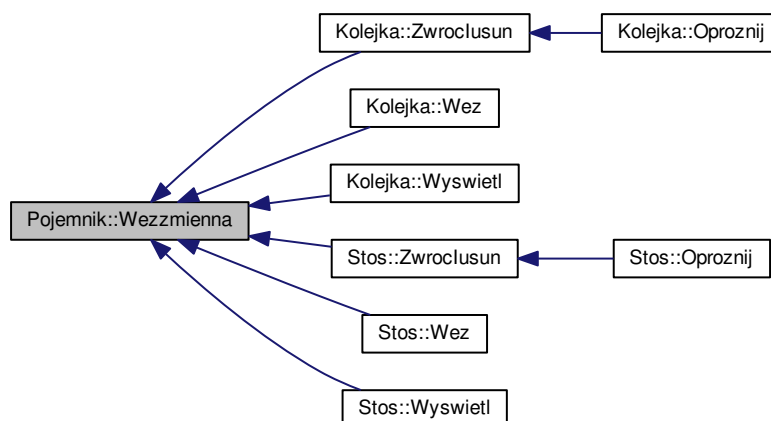
Definition at line 12 of file Pojemnik.hh.

### 4.5.2 Member Function Documentation

#### 4.5.2.1 `double Pojemnik::Wezzmienna ( ) [inline]`

Definition at line 18 of file Pojemnik.hh.

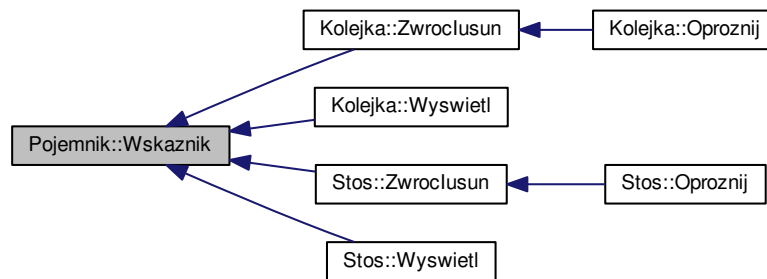
Here is the caller graph for this function:



#### 4.5.2.2 `Pojemnik* Pojemnik::Wskaznik ( ) [inline]`

Definition at line 19 of file Pojemnik.hh.

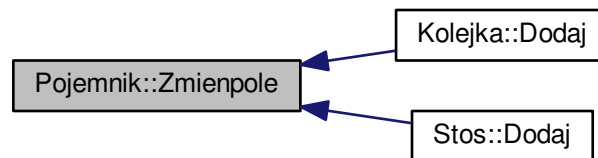
Here is the caller graph for this function:



#### 4.5.2.3 void Pojemnik::Zmienpole ( double *pom* ) [inline]

Definition at line 17 of file `Pojemnik.hh`.

Here is the caller graph for this function:



### 4.5.3 Member Data Documentation

#### 4.5.3.1 Pojemnik\* Pojemnik::wsk =NULL

Definition at line 15 of file `Pojemnik.hh`.

#### 4.5.3.2 double Pojemnik::zmienna =0 [private]

Definition at line 13 of file `Pojemnik.hh`.

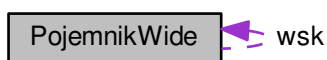
The documentation for this class was generated from the following file:

- [Pojemnik.hh](#)

## 4.6 PojemnikWide Class Reference

```
#include <PojemnikWide.hh>
```

Collaboration diagram for PojemnikWide:



## Public Member Functions

- void [Zmienpole](#) (string pom)
- int & [Wezindeks](#) ()
- string [Wezzmienna](#) ()
- [PojemnikWide](#) \* [Wskaznik](#) ()

## Public Attributes

- [PojemnikWide](#) \* [wsk](#) =NULL

## Private Attributes

- string [zmienna](#)
- int [indeks](#) =0

### 4.6.1 Detailed Description

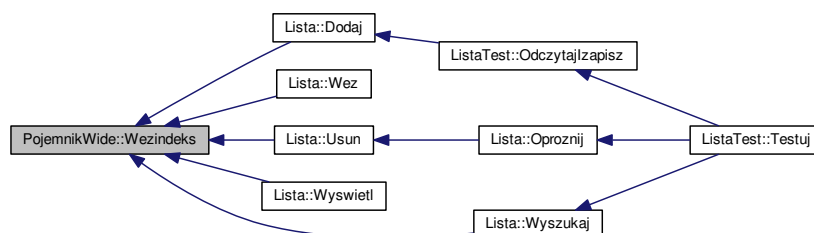
Definition at line 12 of file PojemnikWide.hh.

### 4.6.2 Member Function Documentation

#### 4.6.2.1 int& PojemnikWide::Wezindeks ( ) [inline]

Definition at line 19 of file PojemnikWide.hh.

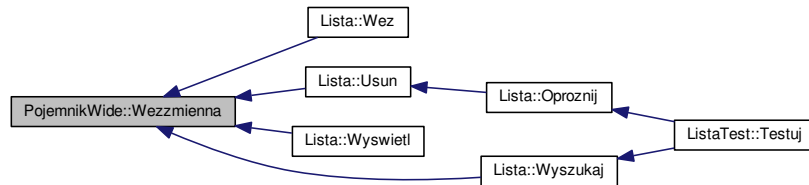
Here is the caller graph for this function:



#### 4.6.2.2 string PojemnikWide::Wezzmienna ( ) [inline]

Definition at line 20 of file PojemnikWide.hh.

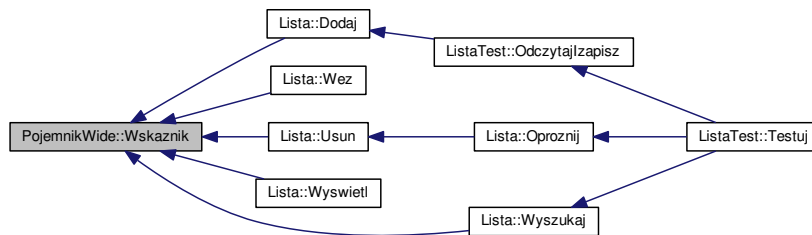
Here is the caller graph for this function:



#### 4.6.2.3 PojemnikWide\* PojemnikWide::Wskaznik ( ) [inline]

Definition at line 21 of file PojemnikWide.hh.

Here is the caller graph for this function:



#### 4.6.2.4 void PojemnikWide::Zmienpole ( string *pom* ) [inline]

Definition at line 18 of file PojemnikWide.hh.

Here is the caller graph for this function:



### 4.6.3 Member Data Documentation

#### 4.6.3.1 int PojemnikWide::indeks =0 [private]

Definition at line 14 of file PojemnikWide.hh.



#### 4.6.3.2 PojemnikWide\* PojemnikWide::wsk =NULL

Definition at line 16 of file PojemnikWide.hh.

#### 4.6.3.3 string PojemnikWide::zmienna [private]

Definition at line 13 of file PojemnikWide.hh.

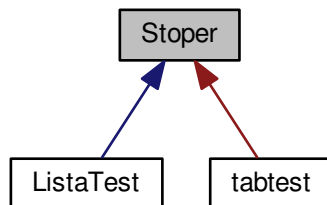
The documentation for this class was generated from the following file:

- [PojemnikWide.hh](#)

## 4.7 Stoper Class Reference

```
#include <Stoper.hh>
```

Inheritance diagram for Stoper:



### Public Member Functions

- void [start](#) ()
- void [stop](#) ()
- double [get\\_time](#) ()  
*roznica czasowa*
- bool [zapis\\_do\\_pliku](#) ()  
*Zapis zmierzonego czasu do pliku.*

### Private Attributes

- clock\_t [czas1](#) =0
- clock\_t [czas2](#) =0

#### 4.7.1 Detailed Description

Definition at line 10 of file Stoper.hh.

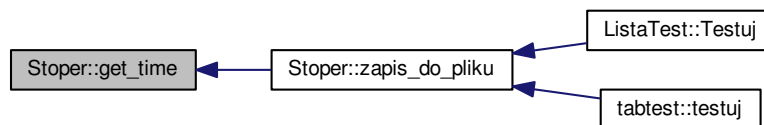
## 4.7.2 Member Function Documentation

### 4.7.2.1 `double Stoper::get_time ( )`

Zwraca roznice czasu miedzy "startem a "stopem". Wartosci wyrazone w sekundach

Definition at line 8 of file Stoper.cpp.

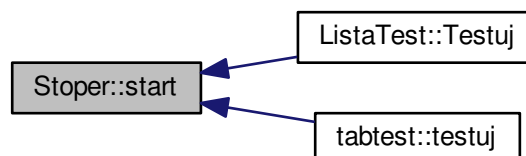
Here is the caller graph for this function:



### 4.7.2.2 `void Stoper::start ( )` `[inline]`

Definition at line 15 of file Stoper.hh.

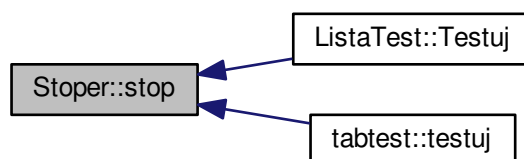
Here is the caller graph for this function:



### 4.7.2.3 `void Stoper::stop ( )` `[inline]`

Definition at line 16 of file Stoper.hh.

Here is the caller graph for this function:

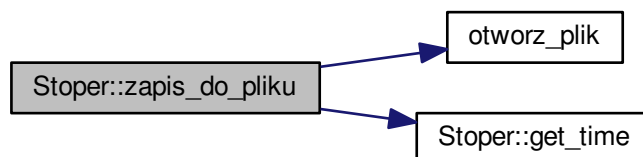


#### 4.7.2.4 bool Stoper::zapis\_do\_pliku ( )

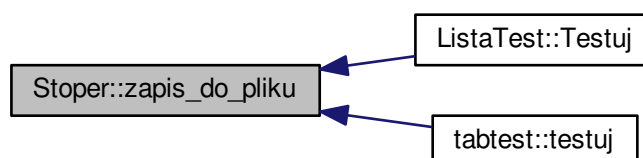
Wywołanie tej funkcji skutkuje dopisaniem do pliku "czaszy.dat" ostatniej różnicy czasowej ("czas\_stop"-"czas\_start")  
Wartości wyrażone w sekundach

Definition at line 42 of file Stoper.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



#### 4.7.3 Member Data Documentation

#### 4.7.3.1 `clock_t Stoper::czas1 =0` [private]

Definition at line 11 of file Stoper.hh.

#### 4.7.3.2 `clock_t Stoper::czas2 =0` [private]

Definition at line 12 of file Stoper.hh.

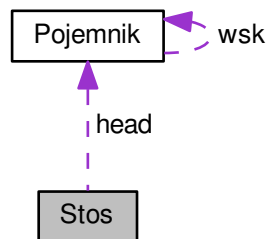
The documentation for this class was generated from the following files:

- [Stoper.hh](#)
- [Stoper.cpp](#)

## 4.8 Stos Class Reference

```
#include <Stos.hh>
```

Collaboration diagram for Stos:



### Public Member Functions

- void [Dodaj](#) (double elem)
- double [Zwroclusun](#) ()
- double [Wez](#) ()
- bool [Czypusty](#) ()
- int [Rozmiar](#) ()
- void [Oproznij](#) ()
- void [Wyswietl](#) ()

### Private Attributes

- [Pojemnik](#) \* [head](#) =NULL
- int [rozmiar](#) =0

#### 4.8.1 Detailed Description

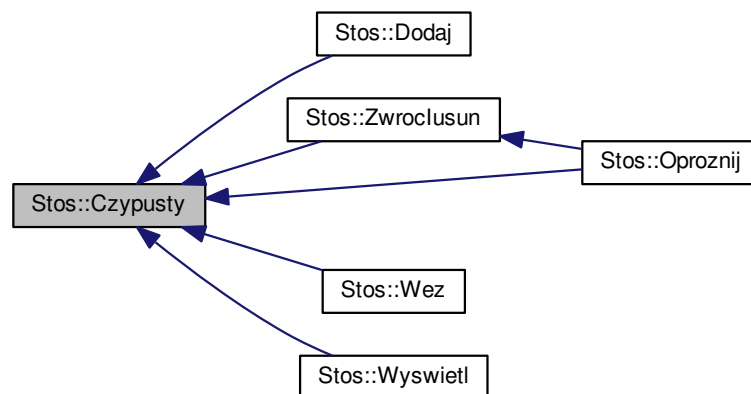
Definition at line 13 of file Stos.hh.

## 4.8.2 Member Function Documentation

### 4.8.2.1 `bool Stos::Czypusty ( ) [inline]`

Definition at line 20 of file Stos.hh.

Here is the caller graph for this function:



### 4.8.2.2 `void Stos::Dodaj ( double elem )`

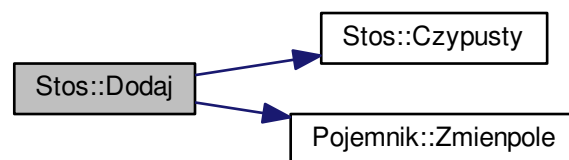
"Kladzie" element na [Stos](#)

Parameters

<i>in</i>	<i>elem</i>	zmienna do przechowania
-----------	-------------	-------------------------

Definition at line 13 of file Stos.cpp.

Here is the call graph for this function:

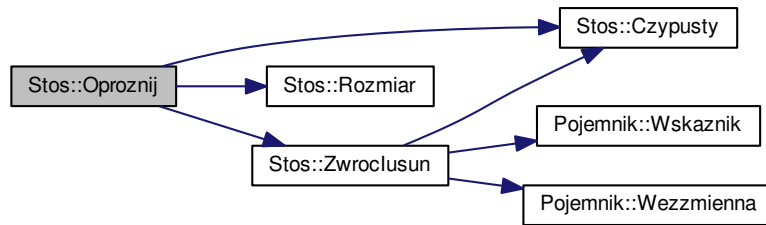


### 4.8.2.3 `void Stos::Oproznij ( )`

Usuwa wszystkie elementy stosu

Definition at line 71 of file Stos.cpp.

Here is the call graph for this function:



#### 4.8.2.4 `int Stos::Rozmiar ( ) [inline]`

Definition at line 21 of file Stos.hh.

Here is the caller graph for this function:

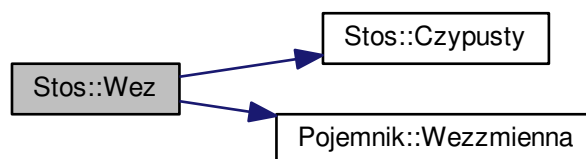


#### 4.8.2.5 `double Stos::Wez ( )`

Zwraca wartosc elementu stosu, ktory jest "na wierzchu". Funkcja NIE sluzy do modyfikowania wartosci tego elementu

Definition at line 57 of file Stos.cpp.

Here is the call graph for this function:

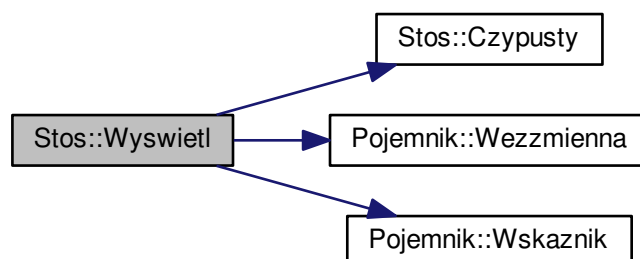


#### 4.8.2.6 void Stos::Wyswietl ( )

Wyswietla wszystkie elementy stosu od "wierzcholka" do dolu

Definition at line 82 of file Stos.cpp.

Here is the call graph for this function:



#### 4.8.2.7 double Stos::Zwroclusun ( )

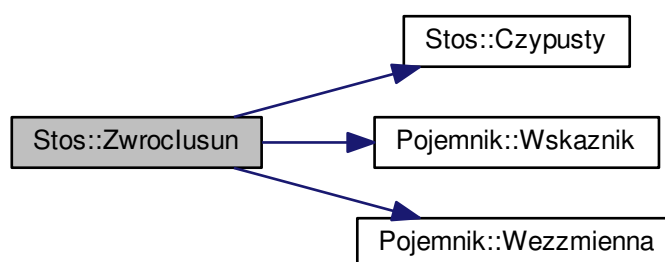
Usuwa element ze stosu

Return values

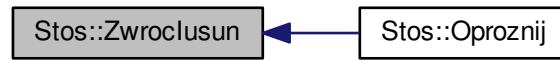
<i>wartosc</i>	usunietego elementu
----------------	---------------------

Definition at line 35 of file Stos.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



### 4.8.3 Member Data Documentation

#### 4.8.3.1 `Pojemnik* Stos::head=NULL` [private]

Definition at line 14 of file `Stos.hh`.

#### 4.8.3.2 `int Stos::rozmiar=0` [private]

Definition at line 15 of file `Stos.hh`.

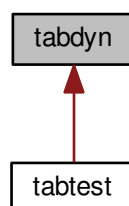
The documentation for this class was generated from the following files:

- [Stos.hh](#)
- [Stos.cpp](#)

## 4.9 tabdyn Class Reference

```
#include <Tablica.hh>
```

Inheritance diagram for `tabdyn`:



### Public Member Functions

- void [usun](#) ()
- void [wyswietl](#) ()
- int [wez\\_rozmiar](#) ()
- void [zainicjalizuj](#) ()



- void `dodaj_liczby` (int pom)
- void `dodaj_liczby_dwa` (int pom)
- void `dodaj_liczby_dek` (int pom)
- int `ile_elementow` ()

### Private Attributes

- int \* `tablica` =NULL
- int `licznik` =0
- int `rozmiar` =0

#### 4.9.1 Detailed Description

Definition at line 7 of file Tablica.hh.

#### 4.9.2 Member Function Documentation

##### 4.9.2.1 void tabdyn::dodaj\_liczby ( int pom )

W przypadku zapelnienia tablicy dynamicznej zwieksza jej rozmiar o jeden (element typu int)

Definition at line 16 of file Tablica.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



##### 4.9.2.2 void tabdyn::dodaj\_liczby\_dek ( int pom )

Gdy zabraknie miejsca w tablicy na nowy element, funkcja zwieksza ja o 10 (elementow typu int)

Definition at line 73 of file Tablica.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:

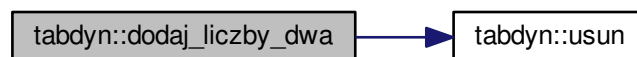


#### 4.9.2.3 void tabdyn::dodaj\_liczby\_dwa ( int *pom* )

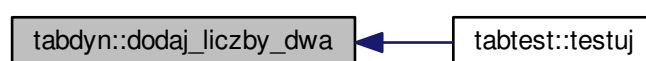
Funkcja różni się od "dodaj\_liczby" sposobem zmieniania rozmiaru tablicy. W przypadku zapelnienia tablicy dynamicznej, funkcja alokuje nowa, dwa razy wieksza

Definition at line 44 of file Tablica.cpp.

Here is the call graph for this function:



Here is the caller graph for this function:



#### 4.9.2.4 int tabdyn::ile\_elementow ( ) [inline]

Zwraca ilosc elementow przechowywanych w tablicy

Definition at line 23 of file Tablica.hh.

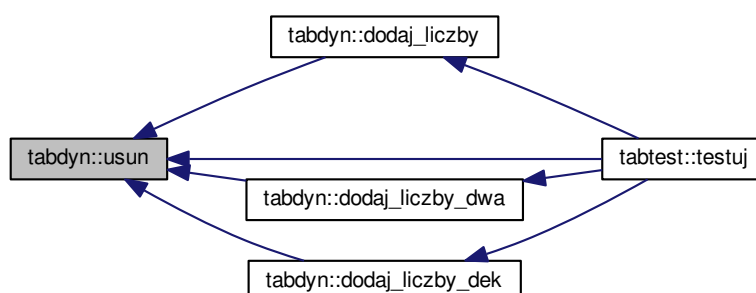
Here is the caller graph for this function:



#### 4.9.2.5 void tabdyn::usun ( ) [inline]

Definition at line 13 of file Tablica.hh.

Here is the caller graph for this function:



#### 4.9.2.6 int tabdyn::wez\_rozmiar ( ) [inline]

Definition at line 15 of file Tablica.hh.

#### 4.9.2.7 void tabdyn::wyswietl ( ) [inline]

Definition at line 14 of file Tablica.hh.

#### 4.9.2.8 void tabdyn::zainicjalizuj ( )

Definition at line 3 of file Tablica.cpp.

Here is the caller graph for this function:



### 4.9.3 Member Data Documentation

#### 4.9.3.1 `int tabdyn::licznik=0` `[private]`

Definition at line 9 of file `Tablica.hh`.

#### 4.9.3.2 `int tabdyn::rozmiar=0` `[private]`

Definition at line 10 of file `Tablica.hh`.

#### 4.9.3.3 `int* tabdyn::tablica=NULL` `[private]`

Definition at line 8 of file `Tablica.hh`.

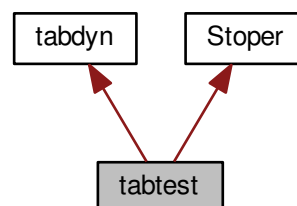
The documentation for this class was generated from the following files:

- [Tablica.hh](#)
- [Tablica.cpp](#)

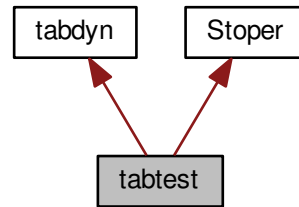
## 4.10 tabtest Class Reference

```
#include <TablicaTest.hh>
```

Inheritance diagram for `tabtest`:



Collaboration diagram for tabtest:



## Public Member Functions

- bool `testuj` (int `ilosc`, int `powtorzenia`, char `opcja`)

*Funkcja testujaca algorytmy.*

## Additional Inherited Members

### 4.10.1 Detailed Description

Definition at line 9 of file TablicaTest.hh.

### 4.10.2 Member Function Documentation

#### 4.10.2.1 bool tabtest::testuj ( int *ilosc*, int *powtorzenia*, char *opcja* )

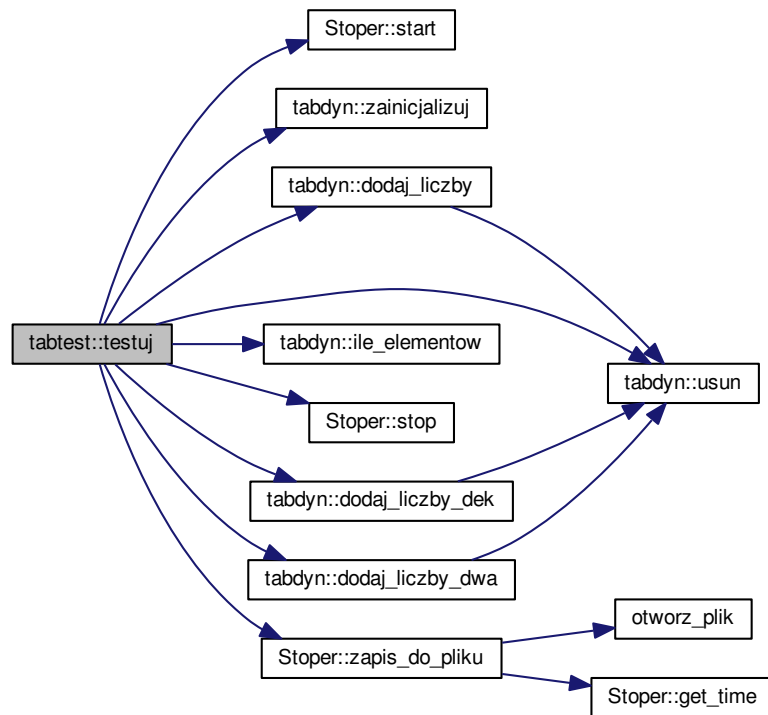
Funkcja wywołuje algorytmy dodawania do tablicy, mierzy czas ich pracy i zapisuje dane (czasy) do pliku "czasy.dat"

#### Parameters

in	<i>ilosc</i>	ilosc lczb jaka ma byc zapisana do tablicy
in	<i>powtorzenia</i>	ile razy ma byc wywolany algorytm, pomiar czasowy
in	<i>opcja</i>	zmienna potrzebna do wyboru algorytmu (1. powiekszzanie tablicy o 1, 2. powiekszzanie tabcy o 10, 3. powiekszzanie tablicy 2 razy)

Definition at line 14 of file TablicaTest.cpp.

Here is the call graph for this function:



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

- [TablicaTest.hh](#)
- [TablicaTest.cpp](#)

## Chapter 5

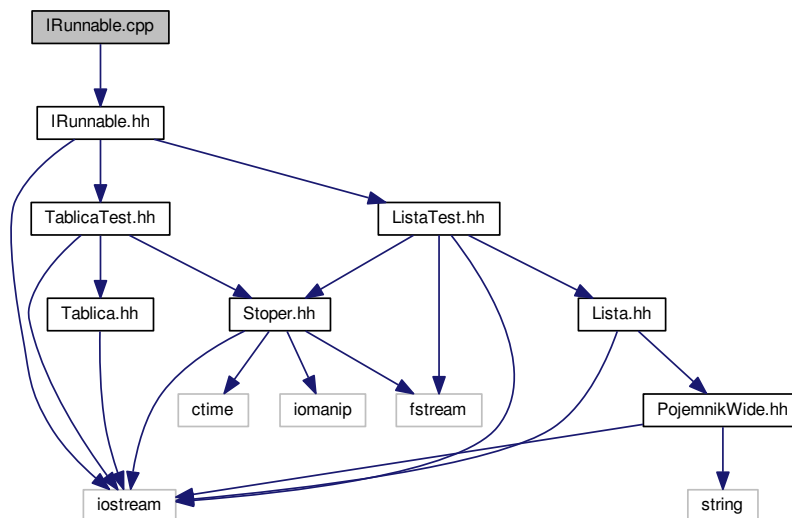
# File Documentation

### 5.1 IRunnable.cpp File Reference

interfejs do testowania programow

```
#include "IRunnable.hh"
```

Include dependency graph for IRunnable.cpp:

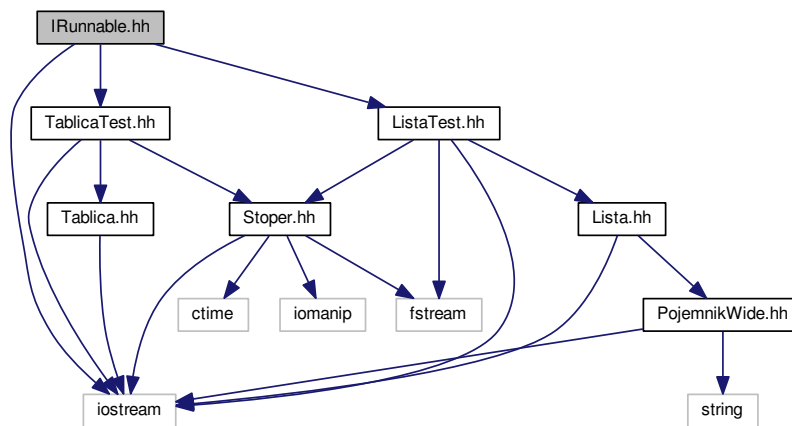


### 5.2 IRunnable.hh File Reference

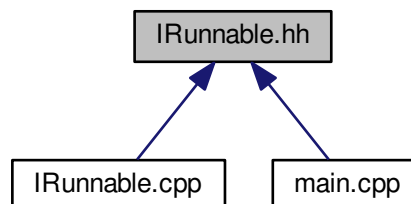
interfejs do testowania programow

```
#include <iostream>
#include "TablicaTest.hh"
#include "ListaTest.hh"
```

Include dependency graph for IRunnable.hh:



This graph shows which files directly or indirectly include this file:



## Classes

- class [IRunnable](#)

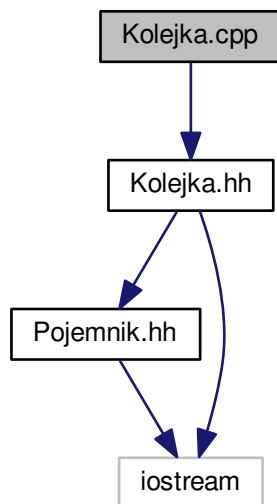
## 5.3 Kolejka.cpp File Reference

Definicja metod interface'u ADT- [Kolejka](#).



```
#include "Kolejka.hh"
```

Include dependency graph for Kolejka.cpp:



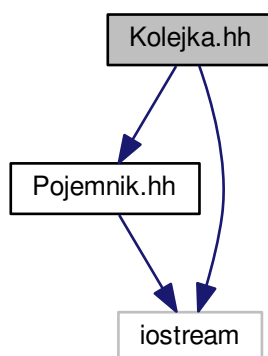
## 5.4 Kolejka.hh File Reference

interface abstrakcyjnego typu danych - [Kolejka](#)

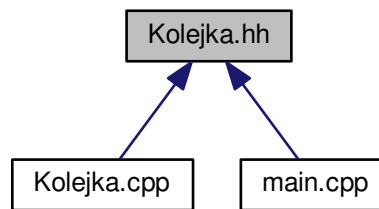
```
#include "Pojemnik.hh"
```

```
#include <iostream>
```

Include dependency graph for Kolejka.hh:



This graph shows which files directly or indirectly include this file:



## Classes

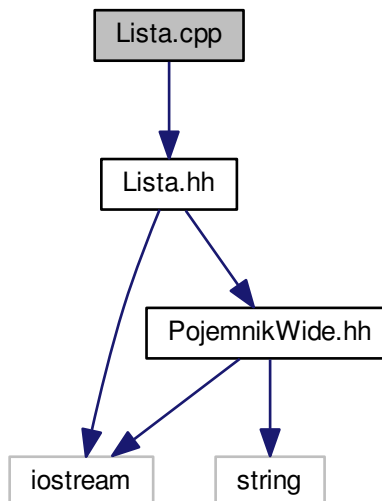
- class [Kolejka](#)

## 5.5 Lista.cpp File Reference

Definicja metod interface'u abstrakcyjnego typu danych - [Lista](#).

```
#include "Lista.hh"
```

Include dependency graph for `Lista.cpp`:



### 5.5.1 Detailed Description

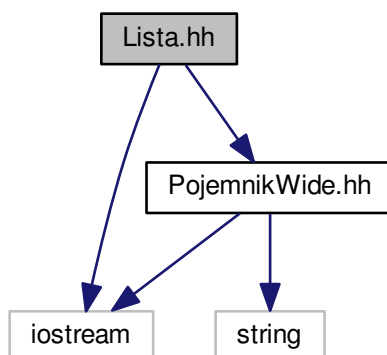
Elementy do Listy mozesz dodawac lub usuwac dowolnie czyli na poczatku, koncu badz wewnatrz listy

Definition in file [Lista.cpp](#).

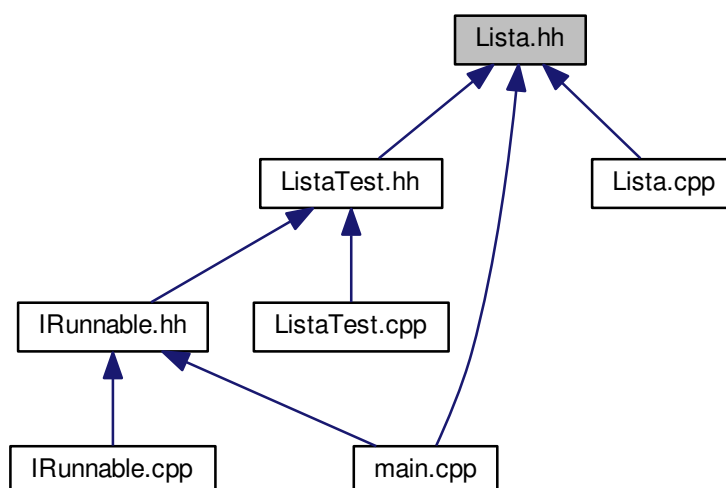
## 5.6 Lista.hh File Reference

interface abstrakcyjnego typu danych - [Lista](#)

```
#include <iostream>
#include "PojemnikWide.hh"
Include dependency graph for Lista.hh:
```



This graph shows which files directly or indirectly include this file:



## Classes

- class [Lista](#)

### 5.6.1 Detailed Description

Elementy do Listy mozesz dodawac lub usuwac dowolnie czyli na poczatku, koncu badz wewnatrz listy

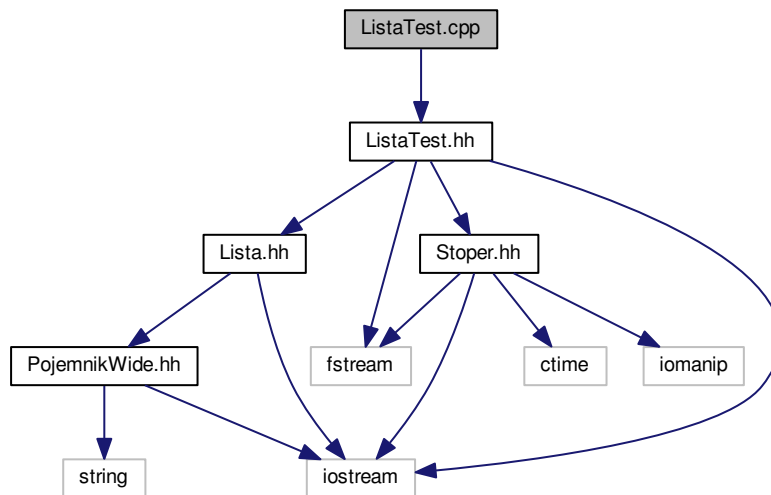
Definition in file [Lista.hh](#).

## 5.7 ListaTest.cpp File Reference

Definicja metod zwiazanych z "ListaTest".

```
#include "ListaTest.hh"
```

Include dependency graph for ListaTest.cpp:



## Functions

- bool [otworz\\_plik\\_odczyt](#) (string nazwapom, fstream &StrmPlikowy)  
*otwarcie pliku*

### 5.7.1 Function Documentation

#### 5.7.1.1 bool otworz\_plik\_odczyt ( string nazwapom, fstream & StrmPlikowy )

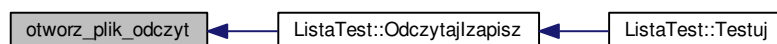
Otwiera plik i tworzy strumien do odczytu

## Parameters

in	<i>nazwapom-</i>	nazwa pliku, który ma zostać otwarty
in	<i>StrmPlikowy-</i>	Zapisywany jest w nim strumień skąd będziemy odczytywać dane

Definition at line 17 of file ListaTest.cpp.

Here is the caller graph for this function:

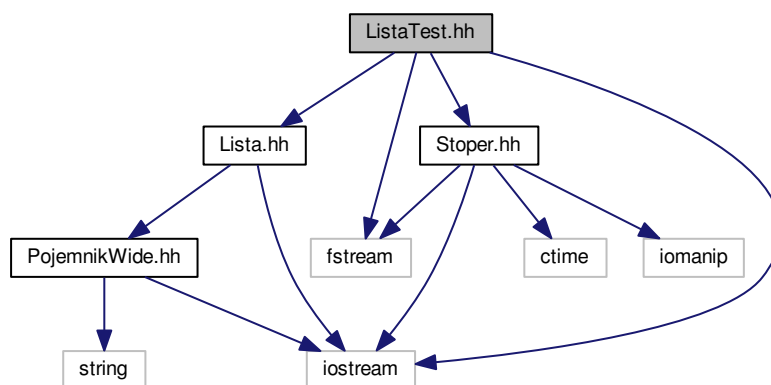


## 5.8 ListaTest.hh File Reference

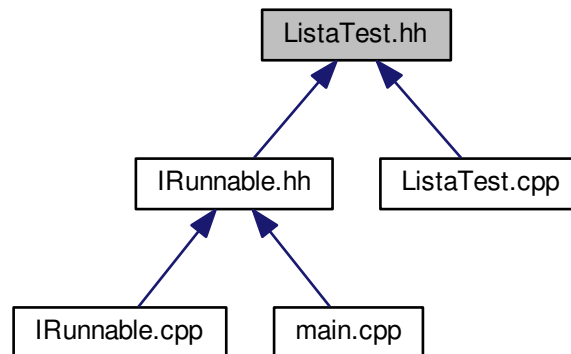
Definicja klasy odpowiedzialnej za testowanie "Listy".

```
#include <iostream>
#include <fstream>
#include "Lista.hh"
#include "Stoper.hh"
```

Include dependency graph for ListaTest.hh:



This graph shows which files directly or indirectly include this file:



## Classes

- class [ListaTest](#)

## Functions

- bool [otworz\\_plik\\_odczyt](#) (string nazwapom, fstream &StrmPlikowy)

*otwarcie pliku*

### 5.8.1 Detailed Description

Odpowiedzialna jest za wczytanie danych z pliku, zapisanie ich do listy i znalezienie pozadanego elementu

Definition in file [ListaTest.hh](#).

### 5.8.2 Function Documentation

#### 5.8.2.1 bool otworz\_plik\_odczyt ( string *nazwapom*, fstream & *StrmPlikowy* )

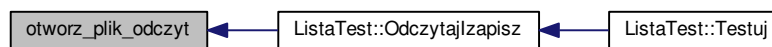
Otwiera plik i tworzy strumien do odczytu

#### Parameters

in	<i>nazwapom</i> -	nazwa pliku, który ma zostac otwarty
in	<i>StrmPlikowy</i> -	Zapisywany jest w nim strumien skad bedziemy odczytywac dane

Definition at line 17 of file ListaTest.cpp.

Here is the caller graph for this function:



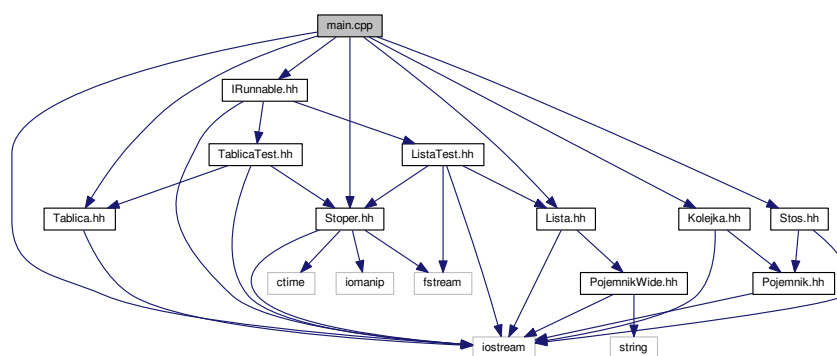
## 5.9 main.cpp File Reference

```

#include <iostream>
#include "Tablica.hh"
#include "IRunnable.hh"
#include "Stoper.hh"
#include "Lista.hh"
#include "Kolejka.hh"
#include "Stos.hh"

```

Include dependency graph for main.cpp:



## Functions

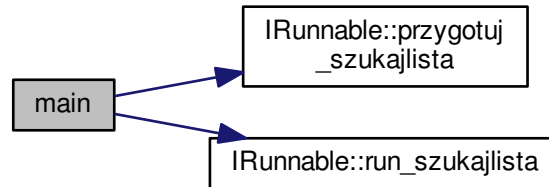
- int [main](#) ()

### 5.9.1 Function Documentation

#### 5.9.1.1 int main ( )

Definition at line 11 of file main.cpp.

Here is the call graph for this function:

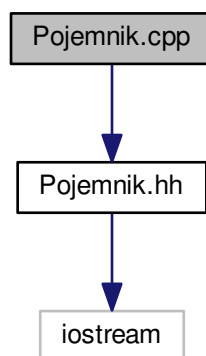


## 5.10 Pojemnik.cpp File Reference

Definicja metod pojedynczego elementu ADT ([Kolejka](#), [Stos](#))

```
#include "Pojemnik.hh"
```

Include dependency graph for Pojemnik.cpp:



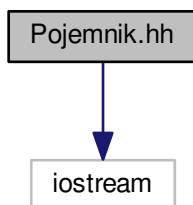
## 5.11 Pojemnik.hh File Reference

Pełni rolę pojedynczego elementu ADT ([Kolejka](#), [Stos](#))

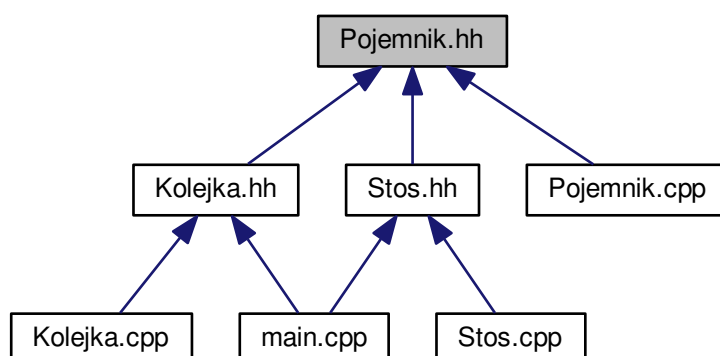


```
#include <iostream>
```

Include dependency graph for Pojemnik.hh:



This graph shows which files directly or indirectly include this file:



## Classes

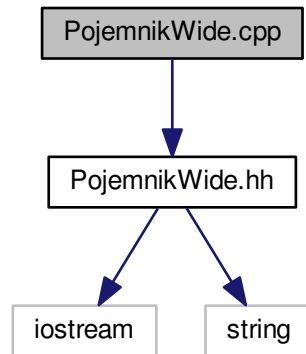
- class [Pojemnik](#)

## 5.12 PojemnikWide.cpp File Reference

Definicje metod pojedynczego elementu ADT ([Lista](#))

```
#include "PojemnikWide.hh"
```

Include dependency graph for PojemnikWide.cpp:



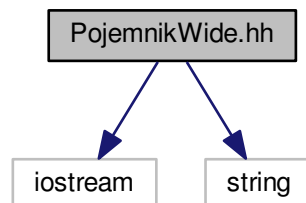
### 5.13 PojemnikWide.hh File Reference

Pełni rolę pojedynczego elementu ADT ([Lista](#))

```
#include <iostream>
```

```
#include <string>
```

Include dependency graph for PojemnikWide.hh:





## Functions

- bool `otworz_plik` (string `nazwapom`, ofstream &`StrmPlikowy`)

*otwarcie pliku*

### 5.14.1 Function Documentation

#### 5.14.1.1 bool `otworz_plik` ( string `nazwapom`, ofstream & `StrmPlikowy` )

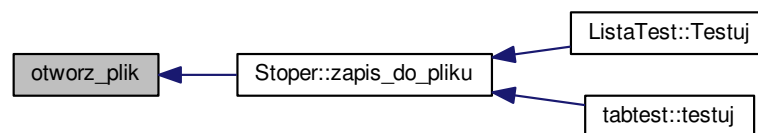
Otwiera plik i tworzy strumien do zapisywania UWAGA: PLIK OTWARTY W TRYBIE DOPISYWANIA

##### Parameters

in	<i>nazwapom</i> -	nazwa pliku, który ma zostać otwarty/utworzony
in	<i>StrmPlikowy</i> -	Zapisywany jest w nim strumien gdzie będziemy zapisywać dane

Definition at line 22 of file `Stoper.cpp`.

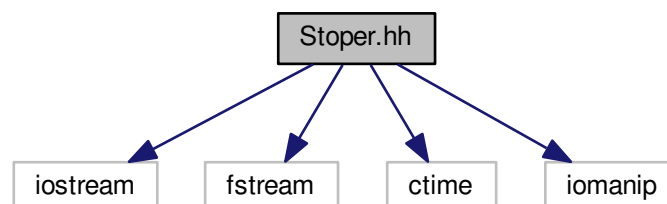
Here is the caller graph for this function:



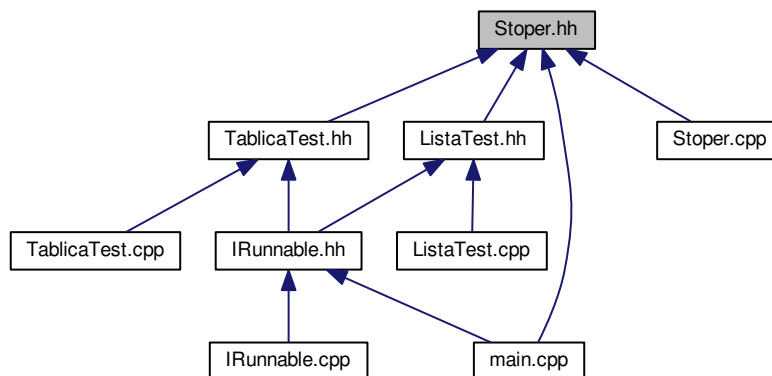
## 5.15 Stoper.hh File Reference

```
#include <iostream>
#include <fstream>
#include <ctime>
#include <iomanip>
```

Include dependency graph for `Stoper.hh`:



This graph shows which files directly or indirectly include this file:



## Classes

- class [Stoper](#)

## Functions

- bool [otworz\\_plik](#) (string nazwapom, ofstream &StrmPlikowy)  
*otwarcie pliku*

### 5.15.1 Function Documentation

#### 5.15.1.1 bool otworz\_plik ( string nazwapom, ofstream & StrmPlikowy )

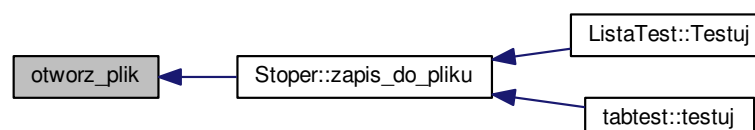
Otwiera plik i tworzy strumien do zapisywania UWAGA: PLIK OTWARTY W TRYBIE DOPISYWANIA

##### Parameters

in	<i>nazwapom-</i>	nazwa pliku, który ma zostać otwarty/utworzony
in	<i>StrmPlikowy-</i>	Zapisywany jest w nim strumien gdzie będziemy zapisywać dane

Definition at line 22 of file Stoper.cpp.

Here is the caller graph for this function:

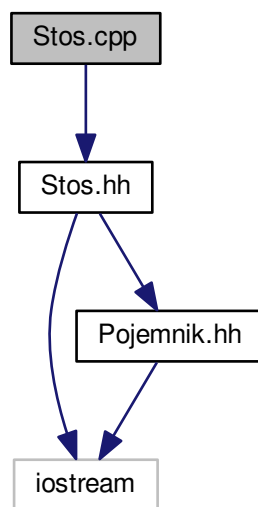


## 5.16 Stos.cpp File Reference

Definicja metod interface'u ADT- [Stos](#).

```
#include "Stos.hh"
```

Include dependency graph for Stos.cpp:

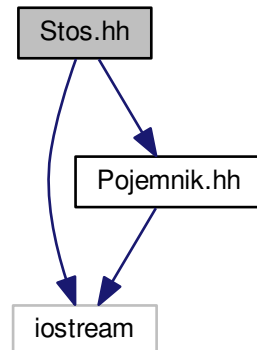


## 5.17 Stos.hh File Reference

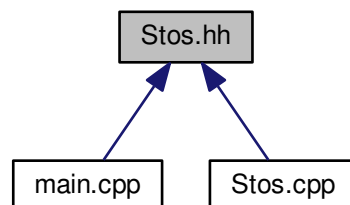
interface abstrakcyjnego typu danych - [Stos](#)

```
#include <iostream>  
#include "Pojemnik.hh"
```

Include dependency graph for Stos.hh:



This graph shows which files directly or indirectly include this file:



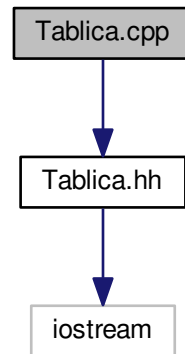
## Classes

- class [Stos](#)

## 5.18 Tablica.cpp File Reference

```
#include "Tablica.hh"
```

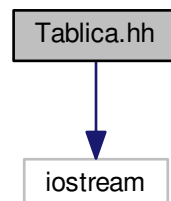
Include dependency graph for Tablica.cpp:



## 5.19 Tablica.hh File Reference

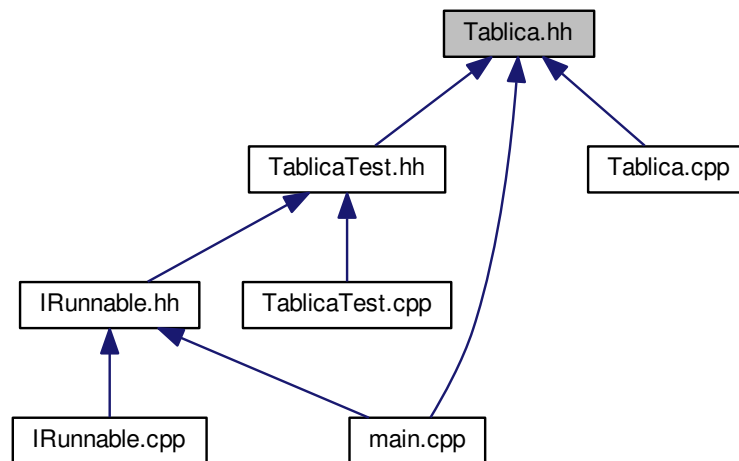
```
#include <iostream>
```

Include dependency graph for Tablica.hh:





This graph shows which files directly or indirectly include this file:



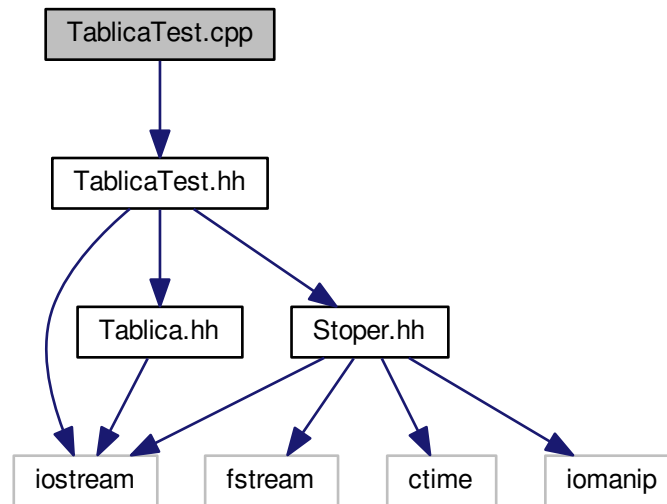
## Classes

- class [tabdyn](#)

## 5.20 TablicaTest.cpp File Reference

```
#include "TablicaTest.hh"
```

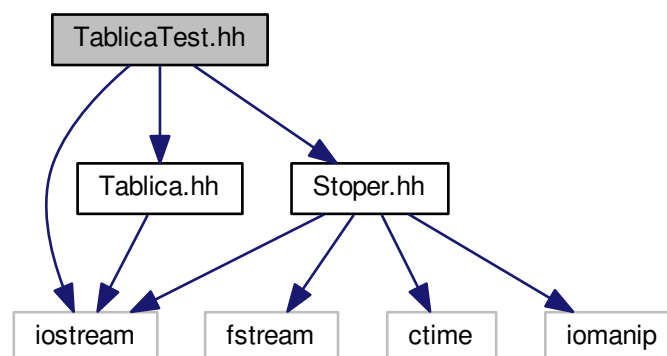
Include dependency graph for TablicaTest.cpp:



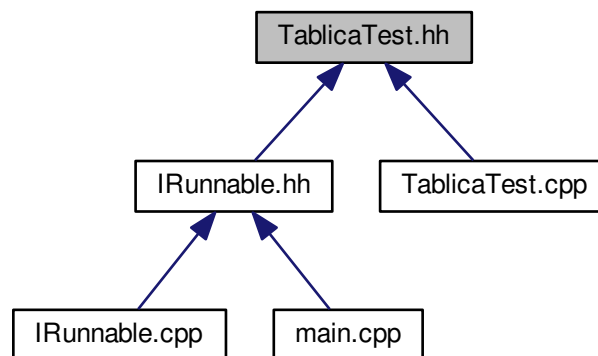
## 5.21 TablicaTest.hh File Reference

```
#include <iostream>
#include "Tablica.hh"
#include "Stoper.hh"
```

Include dependency graph for TablicaTest.hh:



This graph shows which files directly or indirectly include this file:



## Classes

- class [tabtest](#)