

## PPL Assignment

IIT2015099

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# Chapter 1

## Class Index

### 1.1 Class List

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

<a href="#">boys</a>	5
<a href="#">couples</a>	8
<a href="#">girls</a>	11
<a href="#">util</a>	14





## Chapter 2

# File Index

### 2.1 File List

Here is a list of all files with brief descriptions:

PPL/ques1/ <a href="#">boys.cpp</a> . . . . .	15
PPL/ques1/ <a href="#">couples.cpp</a> . . . . .	15
PPL/ques1/ <a href="#">girls.cpp</a> . . . . .	15
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PPL/ques1/ <a href="#">randomgen.cpp</a> . . . . .	16
PPL/ques1/ <a href="#">util.cpp</a> . . . . .	17



## Chapter 3

# Class Documentation

### 3.1 boys Class Reference

#### Public Member Functions

- int `readboyscount` ()
- int `input` (boys \*boyss, int nb)  
*boys data input.*
- int `printrelation` (boys \*boyss, int nb)  
*print girlfriend for a boyfriend if exists and inserts it into log file.*

#### Public Attributes

- std::string `name`
- std::string `type`
- std::string `girlname`
- int `attractiveness`
- int `intelligence`
- int `budget`
- int `happiness`
- int `committed`
- int `min_attractive`

#### 3.1.1 Detailed Description

Definition at line 2 of file boys.cpp.

#### 3.1.2 Member Function Documentation

### 3.1.2.1 input()

```
int boys::input (
    boys * boyss,
    int nb ) [inline]
```

boys data input.

Definition at line 18 of file boys.cpp.

### 3.1.2.2 printrelation()

```
int boys::printrelation (
    boys * boyss,
    int nb ) [inline]
```

print girlfriend for a boyfriend if exists and inserts it into log file.

Definition at line 32 of file boys.cpp.

### 3.1.2.3 readboyscount()

```
int boys::readboyscount ( ) [inline]
```

Increment count if this character is newline.

number of couples.

Definition at line 7 of file boys.cpp.

## 3.1.3 Member Data Documentation

### 3.1.3.1 attractiveness

```
int boys::attractiveness
```

Definition at line 6 of file boys.cpp.

### 3.1.3.2 budget

```
int boys::budget
```

Definition at line 6 of file boys.cpp.

### 3.1.3.3 committed

```
int boys::committed
```

Definition at line 6 of file boys.cpp.

### 3.1.3.4 girlname

```
std::string boys::girlname
```

Definition at line 5 of file boys.cpp.

### 3.1.3.5 happiness

```
int boys::happiness
```

Definition at line 6 of file boys.cpp.

### 3.1.3.6 intelligence

```
int boys::intelligence
```

Definition at line 6 of file boys.cpp.

### 3.1.3.7 min\_attractive

```
int boys::min_attractive
```

Definition at line 6 of file boys.cpp.

### 3.1.3.8 name

```
std::string boys::name
```

Definition at line 5 of file boys.cpp.

### 3.1.3.9 type

```
std::string boys::type
```

Definition at line 5 of file boys.cpp.

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

- PPL/ques1/[boys.cpp](#)

## 3.2 couples Class Reference

### Public Member Functions

- int [pairing](#) ([boys](#) \*boyss, [girls](#) \*girlss, int nb, int ng)  
*Pairing.*

### Public Attributes

- std::string [bname](#)
- std::string [btype](#)
- std::string [gname](#)
- std::string [gtype](#)
- int [bbud](#)
- int [gbud](#)
- int [batt](#)
- int [gatt](#)
- int [bint](#)
- int [gint](#)
- int [compatibility](#)
- double [happiness](#)

### 3.2.1 Detailed Description

Definition at line 8 of file couples.cpp.

### 3.2.2 Member Function Documentation

### 3.2.2.1 pairing()

```
int couples::pairing (
    boys * boyss,
    girls * girlss,
    int nb,
    int ng ) [inline]
```

Pairing.

Definition at line 14 of file couples.cpp.

## 3.2.3 Member Data Documentation

### 3.2.3.1 batt

```
int couples::batt
```

Definition at line 12 of file couples.cpp.

### 3.2.3.2 bbud

```
int couples::bbud
```

Definition at line 12 of file couples.cpp.

### 3.2.3.3 bint

```
int couples::bint
```

Definition at line 12 of file couples.cpp.

### 3.2.3.4 bname

```
std::string couples::bname
```

Definition at line 11 of file couples.cpp.

#### 3.2.3.5 btype

```
std::string couples::btype
```

Definition at line 11 of file couples.cpp.

#### 3.2.3.6 compatibility

```
int couples::compatibility
```

Definition at line 12 of file couples.cpp.

#### 3.2.3.7 gatt

```
int couples::gatt
```

Definition at line 12 of file couples.cpp.

#### 3.2.3.8 gbud

```
int couples::gbud
```

Definition at line 12 of file couples.cpp.

#### 3.2.3.9 gint

```
int couples::gint
```

Definition at line 12 of file couples.cpp.

#### 3.2.3.10 gname

```
std::string couples::gname
```

Definition at line 11 of file couples.cpp.



#### 3.2.3.11 gtype

```
std::string couples::gtype
```

Definition at line 11 of file couples.cpp.

#### 3.2.3.12 happiness

```
double couples::happiness
```

Definition at line 13 of file couples.cpp.

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

- PPL/ques1/[couples.cpp](#)

## 3.3 girls Class Reference

### Public Member Functions

- int [readgirlscount](#) ()
- int [input](#) ([girls](#) \*girlss, int ng)  
*reading girls data.*

### Public Attributes

- std::string [name](#)
- std::string [type](#)
- std::string [boyname](#)
- std::string [need](#)
- int [attractiveness](#)  
*attributes of girls.*
- int [maintenance](#)
- int [intelligence](#)
- int [happiness](#)
- int [committed](#)

### 3.3.1 Detailed Description

Definition at line 1 of file girls.cpp.

### 3.3.2 Member Function Documentation

### 3.3.2.1 input()

```
int girls::input (
    girls * girlss,
    int ng ) [inline]
```

reading girls data.

Definition at line 17 of file girls.cpp.

### 3.3.2.2 readgirlscount()

```
int girls::readgirlscount ( ) [inline]
```

Increment count if this character is newline.

number of couples.

Definition at line 6 of file girls.cpp.

## 3.3.3 Member Data Documentation

### 3.3.3.1 attractiveness

```
int girls::attractiveness
```

attributes of girls.

Definition at line 5 of file girls.cpp.

### 3.3.3.2 boyname

```
std::string girls::boyname
```

Definition at line 4 of file girls.cpp.

### 3.3.3.3 committed

```
int girls::committed
```

Definition at line 5 of file girls.cpp.

#### 3.3.3.4 happiness

```
int girls::happiness
```

Definition at line 5 of file girls.cpp.

#### 3.3.3.5 intelligence

```
int girls::intelligence
```

Definition at line 5 of file girls.cpp.

#### 3.3.3.6 maintenance

```
int girls::maintenance
```

Definition at line 5 of file girls.cpp.

#### 3.3.3.7 name

```
std::string girls::name
```

Definition at line 4 of file girls.cpp.

#### 3.3.3.8 need

```
std::string girls::need
```

Definition at line 4 of file girls.cpp.

#### 3.3.3.9 type

```
std::string girls::type
```

Definition at line 4 of file girls.cpp.

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

- PPL/ques1/[girls.cpp](#)

## 3.4 util Class Reference

### Public Member Functions

- `int coupling ()`

#### 3.4.1 Detailed Description

Definition at line 1 of file util.cpp.

#### 3.4.2 Member Function Documentation

##### 3.4.2.1 `coupling()`

```
int util::coupling ( ) [inline]
```

Reading the count of boys from "boys.txt" .

Reading the count of boys from "boys.txt" .

taking boys input from boys.txt .

taking girls input from boys.txt.

pairing girl-boys if attractive of girl is greater than boy's requirement, satisfying the budget of boy and boys fall under the selection criterion of girl.

printing girlfriend of a boy if he is committed.

Definition at line 4 of file util.cpp.

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

- `PPL/ques1/util.cpp`

## Chapter 4

# File Documentation

### 4.1 PPL/ques1/boys.cpp File Reference

```
#include <fstream>
```

#### Classes

- class [boys](#)

### 4.2 PPL/ques1/couples.cpp File Reference

```
#include "girls.cpp"  
#include "boys.cpp"  
#include "gifts.cpp"  
#include <fstream>  
#include <ctime>  
#include <math.h>
```

#### Classes

- class [couples](#)

### 4.3 PPL/ques1/girls.cpp File Reference

#### Classes

- class [girls](#)

## 4.4 PPL/ques1/ques1.cpp File Reference

```
#include <iostream>
#include <stdlib.h>
#include <unistd.h>
#include "couples.cpp"
#include <string.h>
#include <fstream>
#include <ctime>
#include "util.cpp"
```

### Functions

- int [main](#) (int argc, char \*\*argv)

#### 4.4.1 Function Documentation

##### 4.4.1.1 main()

```
int main (
    int argc,
    char ** argv )
```

Definition at line 10 of file ques1.cpp.

## 4.5 PPL/ques1/randomgen.cpp File Reference

```
#include <iostream>
#include "gifts.cpp"
```

### Functions

- int [main](#) (int argc, char \*\*argv)

#### 4.5.1 Function Documentation

#### 4.5.1.1 main()

```
int main (
    int argc,
    char ** argv )
```

Randomly Generating different types of boys in boys.txt.

boy name.

boy type.

attractiveness.

intelligent.

budget.

minimum attr.

Randomly Generating different types of girls in girls.txt.

Name.

type.

type.

attractiveness.

intelligent.

maintenance.

different types of gift int gift.txt.

type.

Price.

Value.

luxury gifts will have more Price.

Value.

Generating the gifts in an sorted order of their price.

if gift is luxury keeping it in luxury.txt as well.

Definition at line 3 of file randomgen.cpp.

## 4.6 PPL/ques1/util.cpp File Reference

### Classes

- class [util](#)

