

Part 1:

```
circle.cpp:11:58: error: no match for 'operator<' (operand types are 'std::basic_ostream<char>' and '<unresolved overloaded function type>')
    cout<<"This Program computes various metrics of a circle"<<endl;//Notify the use
r of what this program does
    ~~~~~^~~~~
In file included from /usr/include/c++/8/bits/stl_algobase.h:64,
                 from /usr/include/c++/8/bits/char_traits.h:39,
                 from /usr/include/c++/8/ios:40,
                 from /usr/include/c++/8/ostream:38,
                 from /usr/include/c++/8/iostream:39,
                 from circle.cpp:1:
/usr/include/c++/8/bits/stl_pair.h:454:5: note: candidate: 'template<class _T1,
class _T2> constexpr bool std::operator<(const std::pair<_T1, _T2>&, const std::
pair<_T1, _T2>&)'
```

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circle.cpp: In function 'int main()':
circle.cpp:13:6: error: 'users_radus' was not declared in this scope
    cin>>users_radus;
    ^~~~~~
circle.cpp:13:6: note: suggested alternative: 'users_radius'
    cin>>users_radus;
    ^~~~~~
    users_radius
circle.cpp:17:42: error: request for member 'compute_area' in 'first_circle', wh
ich is of pointer type 'Circle*' (maybe you meant to use '->' ?)
    cout<<"Area of circle is:"<<first_circle.compute_area()<<endl;//calculate the a
rea using comput_area and give results to the user
    ~~~~~^~~~~
circle.cpp:18:83: error: no match for 'operator<<' (operand types are 'std::basi
c_ostream<char>::__ostream_type' {aka 'std::basic_ostream<char>'} and '<unresolv
ed overloaded function type>')
    circumference of the circle is:"<<first_circle->compute_circumference()<<end;// ca
lculate the circumference and give the results to the user
    ~~~~~^~~~~
```

```
/usr/include/c++/8/istream:980:5: note: template argument deduction/substitution failed:
/usr/include/c++/8/istream: In substitution of 'template<class _Istream, class _Tp> typename std::enable_if<std::&
basic_istream<_Istream>, std::&is_extractable<typename std::&is_convertible to basic_istream<_Tp>::&_istream_type, _
_Tp>::&_istream_type>::type std::operator>>(_Istream&&, _Tp&&) [with _Istream = std::basic_istream<char>; _Tp = int]':
circle.cpp:13:6:   required from here
/usr/include/c++/8/istream:980:5: error: no type named 'type' in 'struct std::enable_if<false, std::basic_istream<char>
circle.cpp:18:83: error: no match for 'operator<<' (operand types are 'std::basic_ostream<char>::__ostream_type' {aka '
')
    cout<<"The circumference of the circle is:"<<first_circle->compute_circumference()<<end;// calculate the circumference
    ~~~~~^~~~~
In file included from /usr/include/c++/8/iostream:39,
                 from circle.cpp:1:
/usr/include/c++/8/ostream:108:7: note: candidate: 'std::basic_ostream<_CharT, _Traits>::__ostream_type& std::basic_ost
ream_type& (&std::basic_ostream<_CharT, _Traits>::__ostream_type&)' [with _CharT = char, _Traits = std::char_traits<
char>]
```

```
circle.cpp:20:9: error: expected '}' at end of input
    return 0;
    ^
circle.cpp:5:1: note: to match this '{'
{
^
[alsahori@csdept ~]$
```

```
[alsahori@csdept ~]$ g++ circle.cpp -o executable.exe
[alsahori@csdept ~]$ D
```

(Part 2: below)

```

Last login: Tue Feb 28 19:35:57 2023 from 172.18.17.135
[alsahori@csdept ~]$ g++ circle.cpp -o executable_name -g
[alsahori@csdept ~]$ gdb executable_name
GNU gdb (GDB) Red Hat Enterprise Linux 8.2-19.el8
Copyright (C) 2018 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.
Type "show copying" and "show warranty" for details.
This GDB was configured as "x86_64-redhat-linux-gnu".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.

For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from executable_name...done.
(gdb) start
Temporary breakpoint 1 at 0x400b11: file circle.cpp, line 9.
Starting program: /home/alsahori/executable_name

Temporary breakpoint 1, main () at circle.cpp:9
9      first_circle = new Circle();// allocate memory for the object and call the constructo
r
Missing separate debuginfos, use: yum debuginfo-install glibc-2.28-224.el8.x86_64 libgcc-8.5.
0-17.el8.x86_64 libstdc++-8.5.0-17.el8.x86_64
(gdb) continue
Continuing.
This Program computes various metrics of a circle
Please enter the radius of the circle:4

Program received signal SIGSEGV, Segmentation fault.
Circle::compute_area (this=0x614eb0) at circle.h:16
16      (*area = (pi*pow(radius,2.0));return *area;};
(gdb) █

```

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Missing separate debuginfos, use: yum debuginfo-install glibc-2.28-224.el8.x86_64 libgcc-8.5.
0-17.el8.x86_64 libstdc++-8.5.0-17.el8.x86_64
(gdb) continue
Continuing.
This Program computes various metrics of a circle
Please enter the radius of the circle:4

Program received signal SIGSEGV, Segmentation fault.
Circle::compute_area (this=0x614eb0) at circle.h:16
16      (*area = (pi*pow(radius,2.0));return *area;};
(gdb) █

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```

This Program computes various metrics of a circle
Please enter the radius of the circle:4
Area of circle is:50.264
The circumference of the circle is:25.132
[Inferior 1 (process 2270083) exited normally]

```