Practical-8.(b)

Aim: Write a C++ program implementing basic operation of class ios i.e. setf,unsetf,precision,etc.

Algorithm:(i)Start

(ii)Main function

(iii)Print the result

(iv)Stop

Theory: Setf is used to set specific format flags.Unsetf is used to remove the flag setting. The precision of a floating-point number defines how many significant digits it can represent without information loss.

Program:

```
#include <iostream>
int main() {
   std::cout<<"08_Rabin Nadar"<<std::endl;
   int i=52;
   float a=425.0;
   float b=123.500328;
   char str[]="Dream.Then make it happen!";
   std::cout.setf(std::ios::unitbuf);
```

```
   std::cout.setf(std::ios::showpos);
    std::cout<<i<<std::endl;
    std::cout.setf(std::ios::showbase);
    std::cout.setf(std::ios::uppercase);
std::cout.setf(std::ios::hex,std::ios::basefield);
    std::cout<<i<<std::endl;
    std::cout.setf(std::ios::oct,std::ios::basefield);
    std::cout<<i<<std::endl;
    std::cout.fill('0');
    std::cout<<"Fill character"<<std::cout.fill()<<std::endl;
    std::cout.setf(std::ios::dec,std::ios::basefield);
    std::cout.width(10);
    std::cout<<i<<std::endl;
  std::cout<<(std::ios::left,std::ios::adjustfield);
  std::cout.width(10);
   std::cout<<i<<std::endl;
   std::cout.setf(std::ios::internal,std::ios::adjustfield);
std::cout.width(10);
   std::cout<<std::endl;
```

```
    std::cout<<std::endl;
    std::cout.width(10);
    std::cout<<str<<std::endl;
    std::cout.width(40);
    std::cout.setf(std::ios::left,std::ios::adjustfield);
    std::cout.width(40);
    std::cout<<str<<std::endl;
    std::cout.precision(6);
    std::cout<<"Precision"<<std::cout.precision();
    std::cout.setf(std::ios::showpoint);
    std::cout.unsetf(std::ios::showpos);
    std::cout<<std::endl<<a;
    std::cout.unsetf(std::ios::showpoint);
std::cout<<std::endl<<a;
    std::cout.setf(std::ios::fixed,std::ios::floatfield);
    std::cout<<std::endl<<b;
    std::cout.setf(std::ios::scientific,std::ios::floatfield);
    std::cout<<std::endl<<b;
    b=5.375;
```

```
    std::cout.precision(14);
std::cout.setf(std::ios::fixed,std::ios::floatfield);
    std::cout<<std::endl<<b;
    std::cout.setf(std::ios::scientific,std::ios::floatfield);
    std::cout<<std::endl<<b;
    std::cout.unsetf(std::ios::showpoint);
    std::cout.unsetf(std::ios::unitbuf);
    return 0;
}
```

Output:

```
Output
/tmp/iqdiIBrAI9.o
08_Rabin Nadar
+52
0X34
064
Fill character0
0000000+52
+1760000000+52


Dream.Then make it happen!
Dream.Then make it happen!00000000000000
Precision+6
425.000
425
123.500328
1.235003E+02
5.37500000000000
5.37500000000000E+00
```

Conclusion:

We have successfully written the code and executed it.