

```
1  #include <iostream>
2  void Print(int *ptr) {
3      using namespace std;
4      cout << *ptr << endl;
5  }
6  void UsingConst() {
7      using namespace std;
8      float radius = 0;
9      cin >> radius;
10     const float PI = 3.14159f;
11     float area = PI * radius * radius;
12     float circumference = PI * 2 * radius;
13     cout << "Area is : " << area << endl;
14     cout << "Circumference is : " <<
    •     circumference << endl;
15
16     /// Pointers to identifiers with
    •     const qualifier
17     const int CHUNK_SIZE = 512;
18
19     int* ptr = &CHUNK_SIZE; // Not
    •     allowed! This is an error!
20
21     // Initialising a pointer to a
    •     constant integer
22     const int* ptr = &CHUNK_SIZE;
23     // This means that the pointer is not
    •     constant,
24     // but the value at the address is
    •     constant.
25     // So reassignment of pointer works:
26     int y = 10;
```

```

27     ptr = &y; // allowed, since pointer
    •       is not const.
28     // But you are NOT ALLOWED to
    •       indirectly reassign the value at y.
29     *ptr = 5; // Error Code!!
30
31     // Initialising a CONSTANT pointer to a
    •       CONSTANT integer
32     const int *const ptr = &CHUNK_SIZE;
33     *ptr = 1; // ERROR CODE!
34     int x = 10; ptr = &x; // ERROR CODE!
35     Print(&x);
36     cout << "main->x" << x << endl;
37 }
38
39 void PrintRef(const int &ref) {
40     using namespace std;
41     cout << ref << endl;
42 }
43 void UsingConstRef() {
44     int x = 5;
45     PrintRef(1);
46 }
47 int main() {
48     UsingConst();
49     UsingConstRef();
50
51     return 0;
52 }
53

```