Aim: To write a Program to invoke a user defined function to check the condition of $a^3+b^3+c^3=d^3$.

Source Code:

```
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#include<iostream.h>
#include<conio.h>
#include<math.h>
int satis(int a, int b, int c, int d);
void main()
     clrscr();
      int a,b,c,d;
      cout<<"Enter the value of a :";</pre>
      cin>>a;
      cout<<"Enter the value of b :";</pre>
      cin>>b;
      cout << "Enter the value of c :";
      cin>>c;
      cout<<"Enter the value of d :";</pre>
      cin>>d;
      int l=satis(a,b,c,d);
      if(1==0)
            cout<<"\nThe Condition satisfied";</pre>
      else if (l==-1)
            cout<<"\nCondition not satisfieed";</pre>
      getch();
int satis(int a, int b, int c, int d)
      int temp, equality;
      temp=(a*a*a) + (b*b*b) + (c*c*c);
      equality=d*d*d;
      if(temp==equality)
      return(0);
      else
      return (-1);
}
```

Output:

```
Emulator 2.00, Program:
                                                   TC
Enter the value of a :3
Enter the value of b:4
Enter the value of c:5
Enter the value of d :6
The Condition satified_
```