Run Save

```cpp
#include<iostream>
using namespace std;
class person
{
  char c[50];
  int a;
  char g[50];
  public :
  void read ()
  {
    cin>>c>>a>>g;
  cout<<"\n\nname     :: "<<c<<"\nage      :: "<<a<<"\r
  }
};
class teacher : public person
{
char s[50];
int sal;
public :
void read1()
{
cin>>s>>sal;
cout<<"subject  :: "<<s<<"\nsalary   :: "<<sal<<endl;
}
};
class student : public person
{
int r,cl;
char sec[50];
public :
void read2()
{
cin>>r>>cl>>sec;
cout<<"roll no  :: "<<r<<"\nclass    :: "<<cl<<"th star
}
};
main()
{
  teacher t1;
  student s1;
  cout<<"---------teacher--------\n";
  t1.read();
  t1.read1();
  cout<<"\n---------student----------\n";
  s1.read();
  s1.read2();
}
```

```
nithin 27 male english 90000
mithun 18 male 21 12 b
```

```
---------teacher--------

name     :: nithin
age      :: 27
gender   :: male
subject  :: english
salary   :: 90000

---------student----------

name     :: mithun
age      :: 18
gender   :: male

roll no  :: 21
class    :: 12th standard
section  :: b
```

Float | Integer

Employee | Vehicle

Animal | Shape

Person

Run | Save

```cpp
#include<iostream>
using namespace std;
class shape
{
  public:
  int l,b,h;
  void read()
  {
    l=5;
    b=6;
    h=2.5;
  }
};
class triangle : public shape
{
public:
void read1()
{
  float area,p;
  area=0.5*h*b;
  p=l+b+h;
  cout<<"----------TRIANGLE----------\nbase
  cout<<"Area Of Triangle      ::  "<<area<<"\nperimete
}
};
class rectangle : public shape
{
public:
   void read2()
   {
      float area,p;
      area=5*5;
      p=2*(l+b);
      cout<<"----------RECTANGLE----------\nlength
      cout<<"Area Of Rectangle     ::  "<<area<<"\nPeri
   }
};
int main()
{
  triangle t1;
  t1.read();
  t1.read1();
  rectangle r1;
  r1.read2();
}
```

```
Your INPUT go's here! Give
only values. do not give like
a=10
```

```
----------TRIANGLE----------
base                    ::  5cm
height                  ::  5cm
Area Of Triangle        ::  6
perimeter of triangle   ::  13
----------RECTANGLE----------
length                  ::  5cm
breadth                 ::  5cm
Area Of Rectangle       ::  25
Perimeter Of Rectangle  ::  26
```

Float Integer

Employee Vehicle

Animal Shape

Person

Run Save

```cpp
#include<iostream>
using namespace std;
class animal
{
  public:
  void eat()
  {
    cout<<"dog and cat-->>"<<endl;
  }
};
class cat : public animal
{
public:
void sleep()
{
cout<<"cat name :: pilli\ncatbread :: donga\n cat weigh
}
};
class dog : public cat
{
public:
void bark()
{
cout<<"dog name :: kukka\ndogbread :: langa\ndog weight
}
};
int main()
{
  animal n;
  cat cat1;
  dog dog1;
  n.eat();
  cat1.sleep();
  dog1.bark();
}
```

```
Your INPUT go's here! Give
only values. do not give like
a=10
```

```
dog and cat-->>
cat name :: pilli
catbread :: donga
 cat weight :: 19kgs
cat colour :: white
dog name :: kukka
dogbread :: langa
dog weight :: 30kgs
dog colour :: black
```

Float | Integer
Employee | Vehicle
Animal | Shape
Person

Run | Save

```cpp
#include<iostream>
using namespace std;
class vehicle
{
  public:
  void read()
  {
   cout<<"make          :: car and truck\nmodel
  }
};
class car : public vehicle
{
public:
void read1()
{
cout<<"----------CAR----------\ncar model :: thar\nseat
}
};
class truck : public vehicle
{
public:
void read2()
{
cout<<"----------truck----------\ntruck model :: mahind
}
};
int main()
{
  car c1;
  c1.read();
  c1.read1();
  truck t1;
  t1.read2();
}
```

Your INPUT go's here! Give only values. do not give like a=10

```
make          :: car and truck
model         :: mahindra thar
year          :: 2022
----------CAR----------
car model :: thar
seating type :: 4*4
fuelcapacity :: 30lts
----------truck----------
truck model :: mahindra
seating type ::2*2
fuelcapacity :: 50lts
```

Float | Integer

Employee | Vehicle

Animal | Shape

Person

Run | Save

```
#include<iostream>
using namespace std;
class employee
{
  public:
  void read()
  {
    cout<<"employee types and details -->> manager and
  }
};
class manager : public employee
{
public:
void read1()
{
cout<<"----------MANAGER---------- \n employeetype :: m
}
};
class engineer : public employee
{
public:
void read2()
{
cout<<"----------ENGINEER----------\n employeetype :: e
}
};
int main()
{
  manager e1;
  e1.read();
  e1.read1();
  engineer e2;
  e2.read2();
}
```

Your INPUT go's here! Give only values. do not give like a=10

```
employee types and details -->> manager and engineer
----------MANAGER----------
 employeetype :: manager
 manager name :: mithun
 salary :: 90k
 bonus :: 15k
----------ENGINEER----------
 employeetype :: engineer
 manager name :: nithin
 salary :: 70k
 bonous :: 7k
```

SIMATS ENGINEERING

C++ Programming

LINGALA MITHUN KUMAR REDDY
192365017

Questions
84. Write a C++ program to create a pointer to an integer and display its value.

Pointer to Fun. | Pointer to Obj.
Array-Float | Array-Char
Array -Int | String
Char | Double
Float | Integer
Employee | Vehicle
Animal | Shape
Person

Run | Save

```
#include<iostream>
using namespace std;
int main()
{
  int x;
  int* y=&x;
  cin>>x;
  cout<<"address of x: "<<y<<endl;
  cout<<"value of x: "<<*y;
  return 0;
}
```

```
5
```

Questions
85. Write a C++ program to create a pointer to a float and display its value.

Pointer to Fun.
Pointer to Obj.
Array-Float
Array-Char
Array -Int
String
Char
Double
Float
Integer
Employee
Vehicle
Animal
Shape
Person

Run Save

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5   float x;
6   float* px=&x;
7   cin>>x;
8   cout<<"address of x: "<<px<<"\n";
9   cout<<"value of x: "<<*px;
10  return 0;
11 }
```

```
3.77
```

Questions
86. Write a C++ program to create a pointer to a double and display its value.

Pointer to Fun.
Pointer to Obj.
Array-Float
Array-Char
Array -Int
String
Char
Double
Float
Integer
Employee
Vehicle
Animal
Shape
Person

Run Save

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5   double v,*p;
6   p=&v;
7   cin>>v;
8   cout<<"value of double: "<<*p<<endl;
9   cout<<"address of double: "<<p;
10  return 0;
11 }
```

```
5
```

SIMATS ENGINEERING

C++ Programming

LINGALA MITHUN KUMAR REDDY
192365017

Questions
87. Write a C++ program to create a pointer to a char and display its value.

Pointer to Fun.
Pointer to Obj.
Array-Float
Array-Char
Array -Int
String
Char
Double
Float
Integer
Employee
Vehicle
Animal
Shape
Person

Run Save

```
1 #include<iostream>
2 #include<string.h>
3 using namespace std;
4 int main()
5 {
6   char q;
7   char* p=&q;
8   cin>>q;
9   cout<<"address of char: "<<p<<endl;
10  cout<<"value of char:  "<<*p;
11  return 0;
12 }
```

```
s
```

SIMATS ENGINEERING

C++ Programming

LINGALA MITHUN KUMAR REDDY
192365017

Questions
88. Write a C++ program to create a pointer to a string and display its value.

Run Save

```
1 #include<iostream>
2 #include<string.h>
3 using namespace std;
4 int main()
5 {
6   string s="hello world";
7   string* p=&s;
8   cout<<"address of s:"<<p<<endl;
9   cout<<"value of s: "<<*p;
10  return 0;
11 }
```

Your INPUT go's here! Give only values. do not give like a=10

Questions
89. Write a C++ program to create a pointer to an array of integers and display its values.

Pointer to Fun.
Pointer to Obj.
Array-Float
Array-Char
Array -Int
String
Char
Double
Float
Integer
Employee
Vehicle
Animal
Shape
Person

Run Save

```cpp
#include<iostream>
using namespace std;
int main()
{
  int i,arr[]={1,2,3,4,5};
  int n=sizeof(arr)/sizeof(arr[0]);
  int* p=arr;
  cout<<"elements of array:\n";
  for(i=0;i<n;i++)
  {
    cout<<*(p+i)<<" "<<endl;
  }
  cout<<"address of array: "<<p<<endl;
  return 0;
}
```

Your INPUT go's here! Give only values. do not give like a=10

SIMATS ENGINEERING

C++ Programming

LINGALA MITHUN KUMAR REDDY
192365017

Questions
90. Write a C++ program to create a pointer to an array of characters and display its values.

Pointer to Fun.
Pointer to Obj.
Array-Float
Array-Char
Array -Int
String
Char
Double
Float
Integer
Employee
Vehicle
Animal
Shape
Person

Run Save

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5   char arr[]="saptha negeswar";
6   char* p=arr;
7   cout<<"address of character: "<<*p<<endl;
8   cout<<"value of character: "<<p;
9   return 0;
10 }
```

Your INPUT go's here! Give only values. do not give like a=10

Questions
91. Write a C++ program to create a pointer to an array of floats and display its values.

Pointer to Fun.
Pointer to Obj.
Array-Float
Array-Char
Array -Int
String
Char
Double
Float
Integer
Employee
Vehicle
Animal
Shape
Person

Run Save

```cpp
#include<iostream>
using namespace std;
int main()
{
  float arr[]={1.2,3.4,5.6,7.8};
  int n=sizeof(arr)/sizeof(arr[0]);
  int i;
  float* p=arr;
  cout<<"elements in array:\n";
  for(i=0;i<n;i++)
  {
    cout<<*(p+i)<<""<<endl;
  }
  cout<<"address of array"<<p;
  return 0;
}
```

Your INPUT go's here! Give only values. do not give like a=10

SIMATS ENGINEERING

C++ Programming

LINGALA MITHUN KUMAR REDDY
192365017

Questions
93. Write a C++ program to create a pointer to a function and call the function using the pointer.

Pointer to Fun.
Pointer to Obj.
Array-Float
Array-Char
Array -Int
String
Char
Double
Float
Integer
Employee
Vehicle
Animal
Shape
Person

Run Save

```
1 #include<iostream>
2 using namespace std;
3 int add(int,int);
4 int add(int a,int b)
5 {
6   return a+b;
7 }
8 int  main()
9 {
10   int (*p)(int,int);
11   p=&add;
12   int sum=(*p)(1234,5678);
13   cout<<"sum: "<<sum;
14   return 0;
15 }
```

Your INPUT go's here! Give only values. do not give like a=10