```cpp
#include<iostream>
using namespace std;

int main()
{
    cout<<"introduction aux systèmes embarqués"<<endl ;
    system(" pause ") ;
    return 0 ;
}
```

```cpp
#include<iostream>
using namespace std;

int main()
{
    float input;
    cin>>input;

    float angle = ((input-512)*90 / 512);

    cout<<"angle = "<<angle<<endl;

    system(" pause ") ;
    return 0 ;
}
```

```cpp
#include<iostream>
#include<cmath>
using namespace std;

int main()
{
    const float dest_long = 10;
    const float dest_latt = 7;

    float curr_long , curr_latt;

    cin>>curr_long;
    cin>>curr_latt;

    float distance = sqrt( pow(dest_long - curr_long , 2) + pow(dest_latt - curr_latt , 2) );

    cout<<"distance = "<<distance<<endl;

    system(" pause ") ;
    return 0 ;
}
```

```cpp
#include<iostream>
using namespace std;

int main()
{
    float input;
    cin>>input;

    float angle;

    angle = ( (input-512) * 90 / 512);
    short sign = ( (int) angle>>31) & 0x01;
    cout<<"angle = "<<angle<<" : "<<sign<<endl;

    system(" pause ") ;
    return 0 ;
}
```

```cpp
#include<iostream>
using namespace std;

int main()
{
    unsigned char input;
    cin>>input;

    cout<<"act1 = "<< ( (input) & 0x07) <<endl;
    cout<<"act2 = "<< ( (input>>3) & 0x07) <<endl;
    cout<<"act3 = "<< ( (input>>6) & 0x03) <<endl;

    system(" pause ") ;
    return 0 ;
}
```

```cpp
#include<iostream>
using namespace std;

int main()
{
    short input=0;
    short act1=6 , act2=4 , act3=2;

    input = (act1<<5) | (act2<<2) | act3;

    cout<<"byte = "<<input<<endl;

    system(" pause ") ;
    return 0 ;
}
```