Q1

CODE

```cpp
//to find the armstrong number
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
    int n,r,num;
    float sum=0;
    cout<<"input the number: ";
    cin>>n;
    num=n;
    while(num!=0)
    {
        r=num%10;
        sum=sum+pow(r,3);
        num=num/10;
    }
    if(sum==n)
        cout<<n<<" is an armstrong number";
    else
        cout<<n<<" is not an armstrong number";
    return 0;
}
```

OUTPUT

```
PS D:\C++> cd "d:\C++\" ; if ($?) { g++ armstrong.cpp -o armstrong } ; if ($?) { .\armstrong }
input the number: 153
153 is an armstrong number
PS D:\C++> cd "d:\C++\" ; if ($?) { g++ armstrong.cpp -o armstrong } ; if ($?) { .\armstrong }
input the number: 200
200 is not an armstrong number
PS D:\C++>
```

Q2

CODE

```cpp
//to print floyd's triangle
#include<iostream>
using namespace std;
int main()
{
    int i,j=1,raw=0,t;
    for(i=1 ; i<=4 ; i++)
    {
        t=0;
        cout<<"\n";
        raw++;
        do
        {
            cout<<j<<" ";
            t++;
            j++;
        }while(t<raw);
    }
    return 0;
}
```

OUTPUT

```
PS D:\C++> cd "d:\C++\" ; if ($?) { g++ floydstriangle.cpp -o floydstriangle } ; if ($?) { .\floydstriangle }

1
2 3
4 5 6
7 8 9 10
PS D:\C++>
```

Q3

CODE

```cpp
// to print half pyramid
#include<iostream>
using namespace std;
int main()
{
    int i,j,raw=0;
    for(i=1 ; i<=5 ; i++)
    {
        cout<<"\n";
        raw++;
        for(j=1 ; j<=raw ; j++)
        {
            cout<<j<<" ";
        }

    }
    return 0;
}
```

OUTPUT

```
PS D:\C++> cd "d:\C++\" ; if ($?) { g++ halfpyramid.cpp -o halfpyramid } ; if ($?) { .\halfpyramid }

1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
PS D:\C++>
```

Q4

CODE

```cpp
#include<iostream>
using namespace std;
int main()
{
    int i;
    for(i=10 ; i>=1 ; i--)
    {
        if(i==6){
            break;
        }
        cout<<i<<" ";
    }
    return 0;
}
```

OUTPUT

```
PS D:\C++> cd "d:\C++\" ; if ($?) { g++ breakat6.cpp -o breakat6 } ; if ($?) { .\breakat6 }
10 9 8 7
PS D:\C++>
```