Body Mass Index

You are given the height H (in metres) and mass M (in kilograms) of Anusree. The Body Mass Index (BMI) of a person is computed as M/H^2.

Report the category into which Anusree falls, based on his BMI:

Category 1: Underweight if BMI ≤18

Category 2: Normal weight if BMI ∈{19, 20,…, 24}

Category 3: Overweight if BMI ∈{25, 26,…, 29}

Category 4: Obesity if BMI ≥30

Input:

The first line of input will contain an integer, T, which denotes the number of testcases. Then the testcases follow.

Each testcase contains a single line of input, with two space separated integers, M,H, which denote the mass and height of Anusree respectively.

Output:

For each testcase, output in a single line, 1,2,3 or 4, based on the category in which Anusree falls.

Sample Input:

3

72 2

80 2

120 2

Sample Output:

1

2

4

C Program

```c
#include <stdio.h>
int main(void) {
        int t,m,h,b;
        scanf("%d",&t);
        while(t--)
        {
        scanf("%d%d",&m,&h);
          b=m/(h*h);
          if(b<=18)
        printf("1\n");
          else if(b>18 && b<=24)
        printf("2\n");
          else if(b>24 && b<=29)
        printf("3\n");
          else if(b>=30)
        printf("4\n");
        }
        return 0;
}
```

C++ Program

```cpp
#include <iostream>
using namespace std;
int main() {
   int t;
cin>>t;
   while(t--){
      int m,h;
cin>>m>>h;
```

```
    int BMI=m/(h*h);

    if (BMI<=18){

cout<<1<<endl;

    }

    else if(BMI>18&&BMI<=24){

cout<<2<<endl;

    }

    else if(BMI>24&&BMI<=29){

cout<<3<<endl;

    }

else{

cout<<4<<endl;

    }

  }

        return 0;

}
```
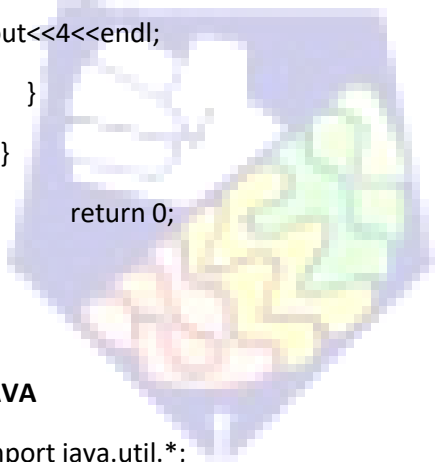
JAVA

```
import java.util.*;

class BMI {

   public static void main(String[] args) {

      Scanner sc = new Scanner(System.in);

      int t = sc.nextInt();

      int arr[][] = new int[t][2];

for(int i =0 ;i<t;i++){

arr[i][0] = sc.nextInt();

arr[i][1] = sc.nextInt();

      }

for(int i=0;i<t;i++){
```

```
        int bmi = (arr[i][0] / (arr[i][1] * arr[i][1]));
if(bmi<= 18)
System.out.println("1");
        else if( bmi>18  &&bmi< 25)
System.out.println("2");
        else if(bmi>24 &&bmi<30)
System.out.println("3");
        else if (bmi>= 30)
System.out.println("4");
    }
sc.close();
   }
}
```

PYTHON

```python
n=int(input())
for i in range(n):
a,b=map(int,input().split())
   c=a/(b*b)
   if(c<=18):
print(1)
elif(19<=c<=24):
print(2)
elif(25<=c<=29):
print(3)
elif(30<=c):
print(4)
```