

## HYPOTENUS KALKULATOR

```
void setup() {  
  //initialise Serial port  
  Serial.begin(9600);  
}  
  
void loop() {  
  int a;  
  int b;  
  float result;  
  
  //print instructions, and wait until there is something in the serial buffer  
  Serial.print("Enter a side value: ");  
  while(!Serial.available());  
  a = readSerial();  
  if(a == 0)  
  {  
    return;  
  }  
  Serial.print("Enter the other side value: ");  
  while(!Serial.available());  
  b = readSerial();  
  if(b == 0)
```

## Programming

```
    {  
        return;  
    }  
    findSide(a,b);
```

```
    Serial.println();  
}
```

//readSerial takes the next integer in the Serial buffer, clears the buffer, then returns it

```
int readSerial()  
{  
    int i = Serial.parseInt();  
  
    //checks if the received value is a valid integer  
    if(i < 1 || (i%10 != 0))  
    {  
        Serial.println("That isn't a valid integer");  
        return 0;  
    }  
    Serial.println(i);  
    Serial.parseInt();  
    return i;  
}
```

```
void findSide(int x, int y)
```

## Programming

```
{  
//calculate C squared by A squared + B squared  
float hypotenuse = sqrt(x*x + y*y);  
  
//print out the result  
Serial.print("Hypotenuse = ");  
Serial.println(hypotenuse);  
}
```