



unreal blueprint exercises

Algorithm I

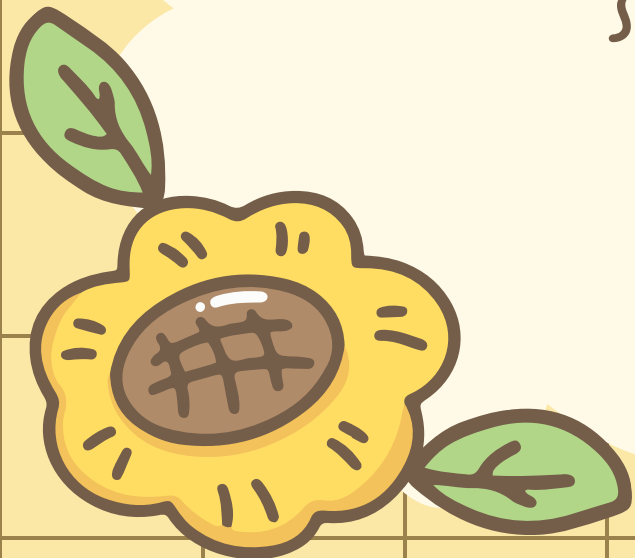
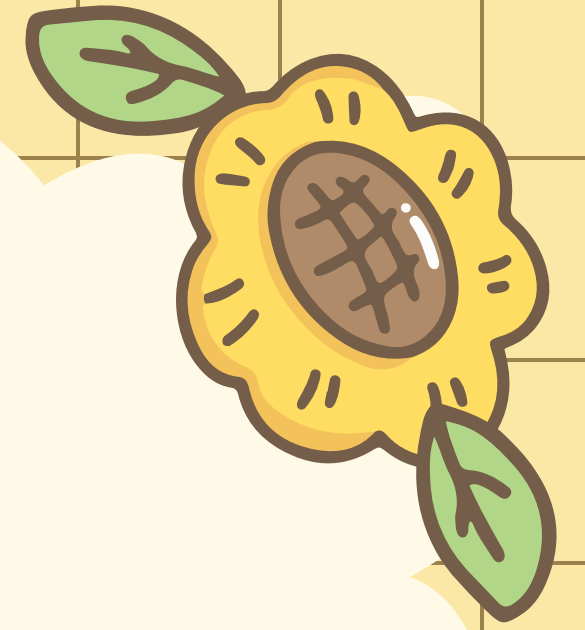
```
int number = 42;
```

```
if (GetNumber() % 2 == 0) {  
    PrintString("Even Number!");  
} else {  
    PrintString("Odd Number!");  
}
```

Algorithm 2

```
float Health = 100;  
int Score = 0;
```

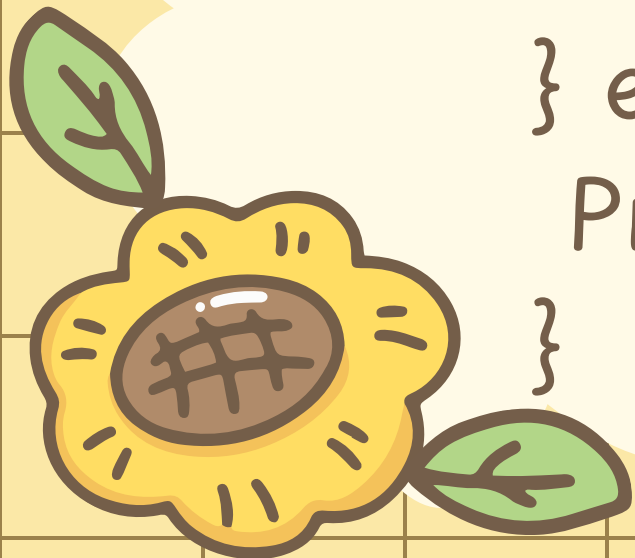
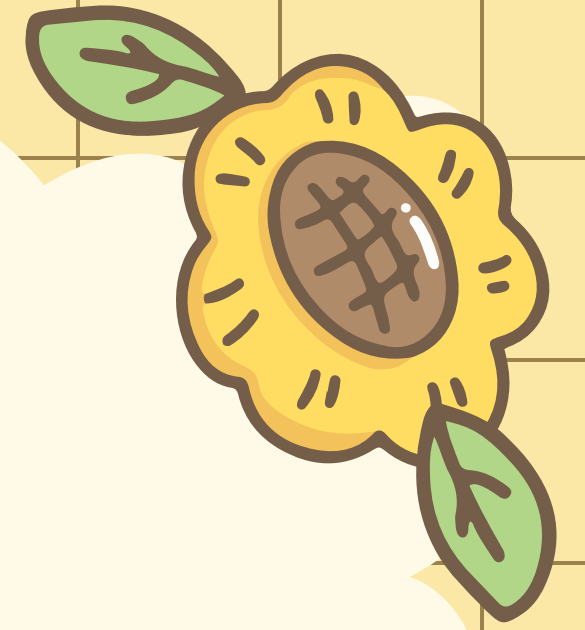
```
if(GetHealth() > 75){  
    SetScore(GetScore() + (GetScore() x 2) + 2);  
    PrintString(GetScore());  
}
```



Algorithm 3

```
float A = 20;  
float B = 0;
```

```
PrintString(GetA() + GetB());  
PrintString(GetA() - GetB());  
PrintString(GetA() x GetB());  
if(GetB() != 0){  
    PrintString(GetA() / GetB());  
} else {  
    PrintString("you can't divide by zero");  
}
```

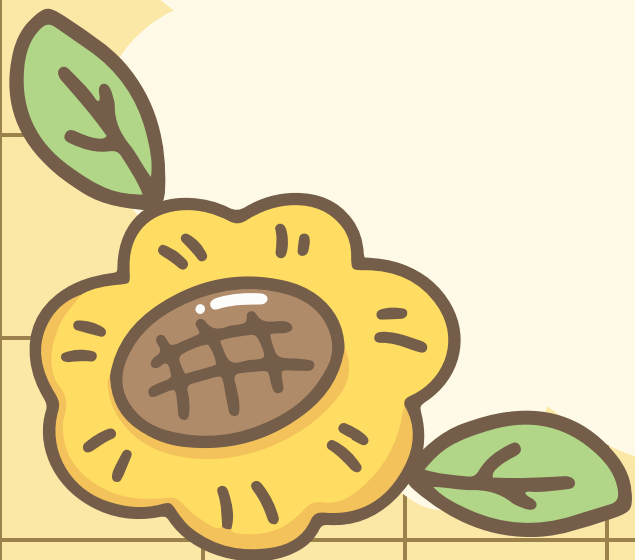
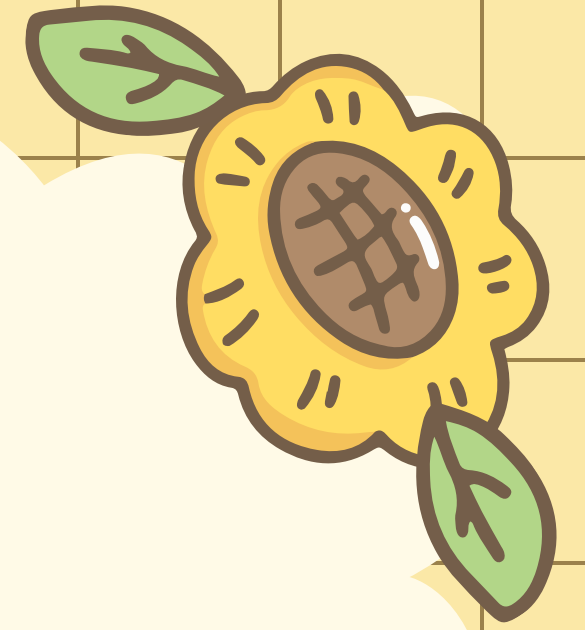


Algorithm 4

```
int number = 5;  
int result = 1;
```

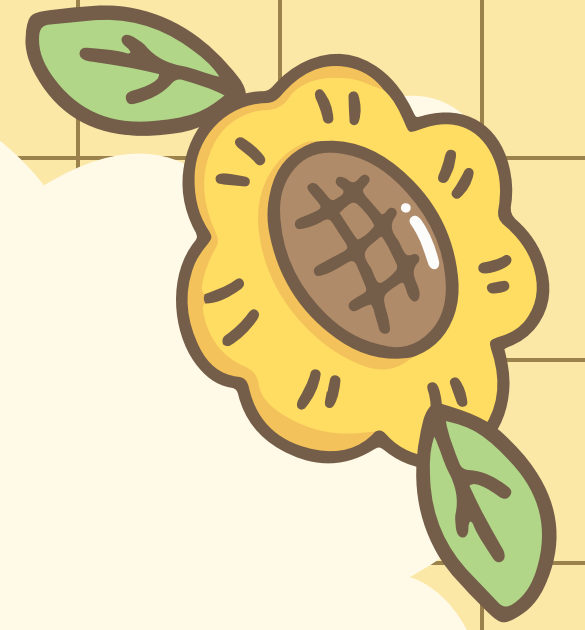
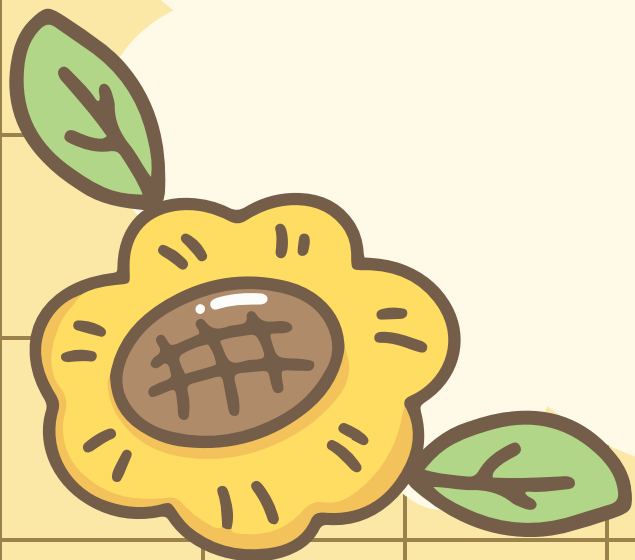
```
for (i = 1; i <= GetNumber(); i++) {  
    SetResult(GetResult() x i);  
}
```

```
PrintString(GetResult());
```



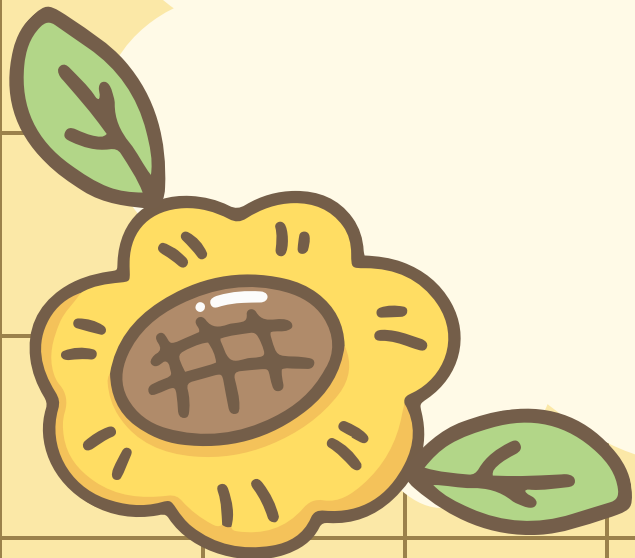
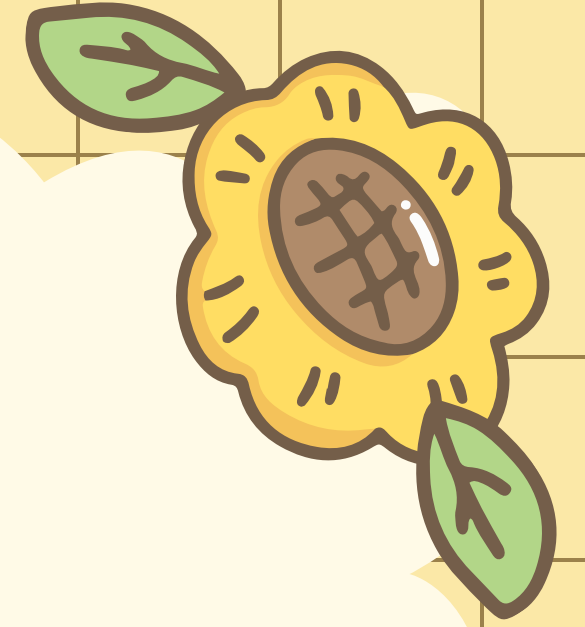
Algorithm 5

```
for(i = 0; i < 20; i++) {  
    for(j = 0; j <= i; j++) {  
        PrintString(i + j);  
    }  
}  
  
PrintString("Loop completed");  
}
```



Algorithm 6

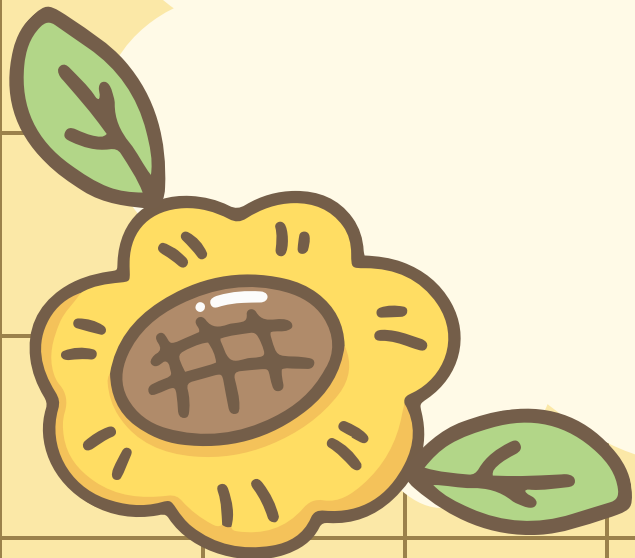
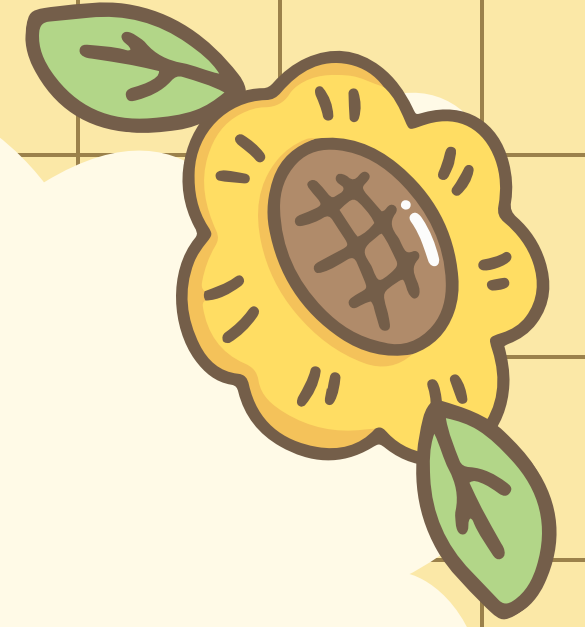
```
int numbers[] = {1, 2, 3, 4, 5, 6};  
int sum = 0;  
  
for (int i = 0; i < numbers.length;  
i++) {  
    SetSum(GetSum() + numbers[i]);  
}  
  
PrintString(GetSum());
```



Algorithm 7

```
int number = 2548;  
int digit = 0;  
int sum = 0;
```

```
While (GetNumber() > 0){  
    SetDigit(GetNumber() % 10);  
    SetSum(GetSum() + GetDigit());  
    SetNumber(GetNumber() / 10);  
}  
PrintString(GetSum());
```



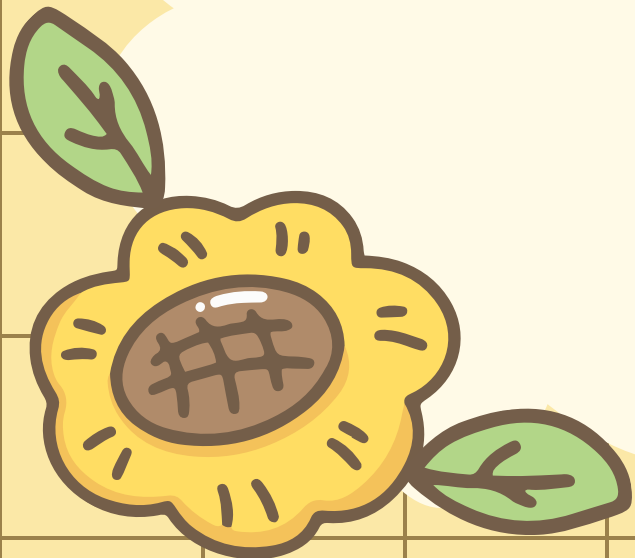
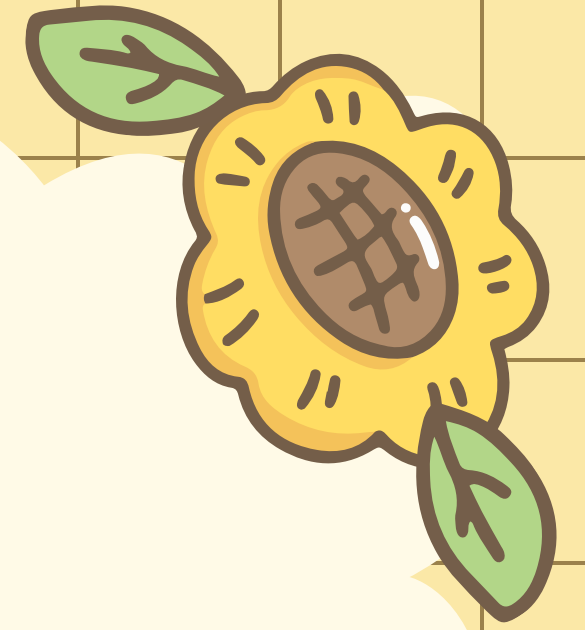
Algorithm 8

//Function declaration

```
int Add(int A, int B, int C) {  
    return GetA() + GetB() + GetC();  
}
```

//Main algorithm

```
PrintString(Add(5,20,6));  
PrintString(Add((103,75,1));
```



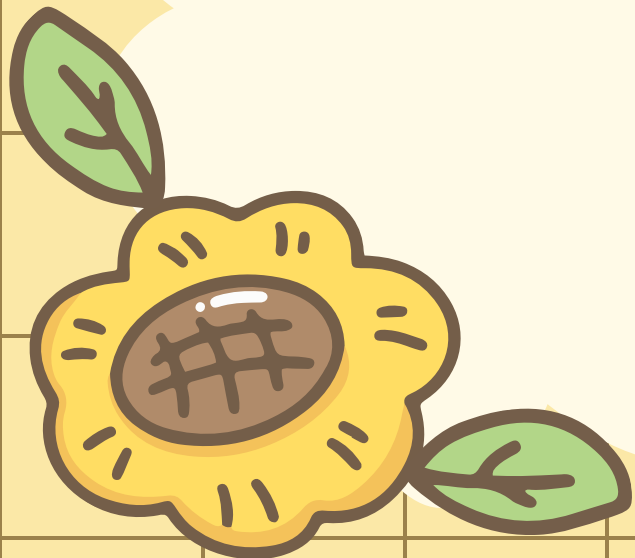
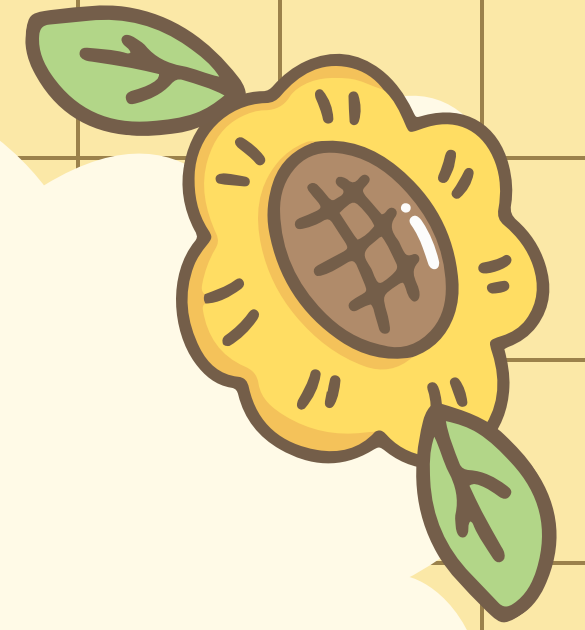
Algorithm 9

//Function declaration

```
boolean IsEven(int Number) {  
    return GetNumber() % 2 == 0;  
}
```

//Main algorithm

```
if (!IsEven(55)) {  
    PrintString("The number is even");  
} else {  
    PrintString("The number is odd");  
}
```



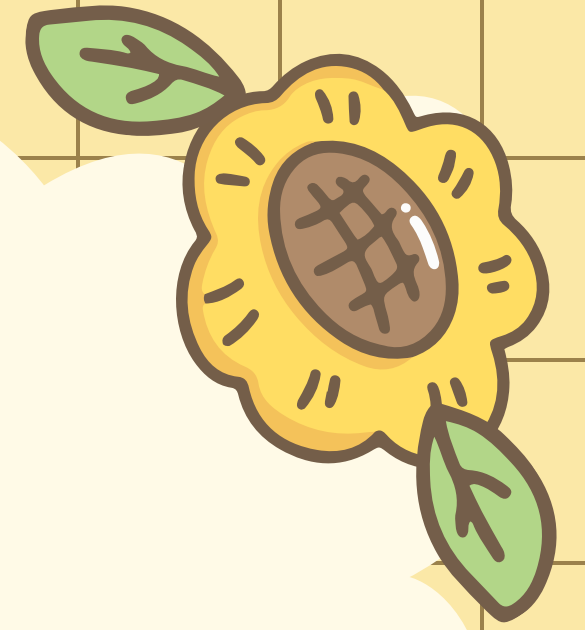
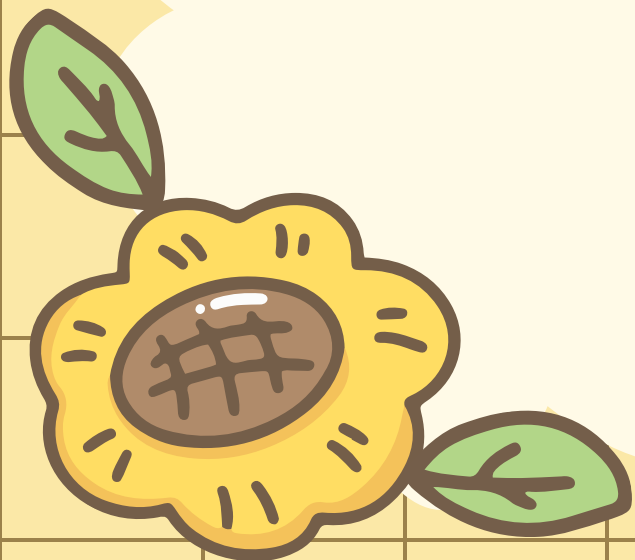
Algorithm 10

//Function declaration

```
float Max(float A, float B) {  
    if (GetA() > GetB()) {  
        return GetA();  
    } else {  
        return GetB();  
    }  
}
```

//Main algorithm

```
PrintString(Max(52,30));
```



Algorithm II

//Function declaration

```
int SumDigits(int Number) {  
    int Sum = 0;  
    int Digit = 0;  
    int Num = 0;  
    SetNum(GetNumber());  
    While (GetNum() > 0){  
        SetDigit(GetNum() % 10);  
        SetSum(GetSum() + GetDigit());  
        SetNum(GetNum() / 10);  
    }  
    return GetSum();  
}
```

//Main algorithm

```
PrintString(SumDigits(5678));
```

