

Einführung in die Programmierung

Tutorium 2 (Präsenzaufgaben)

Wintersemester 2025/2026

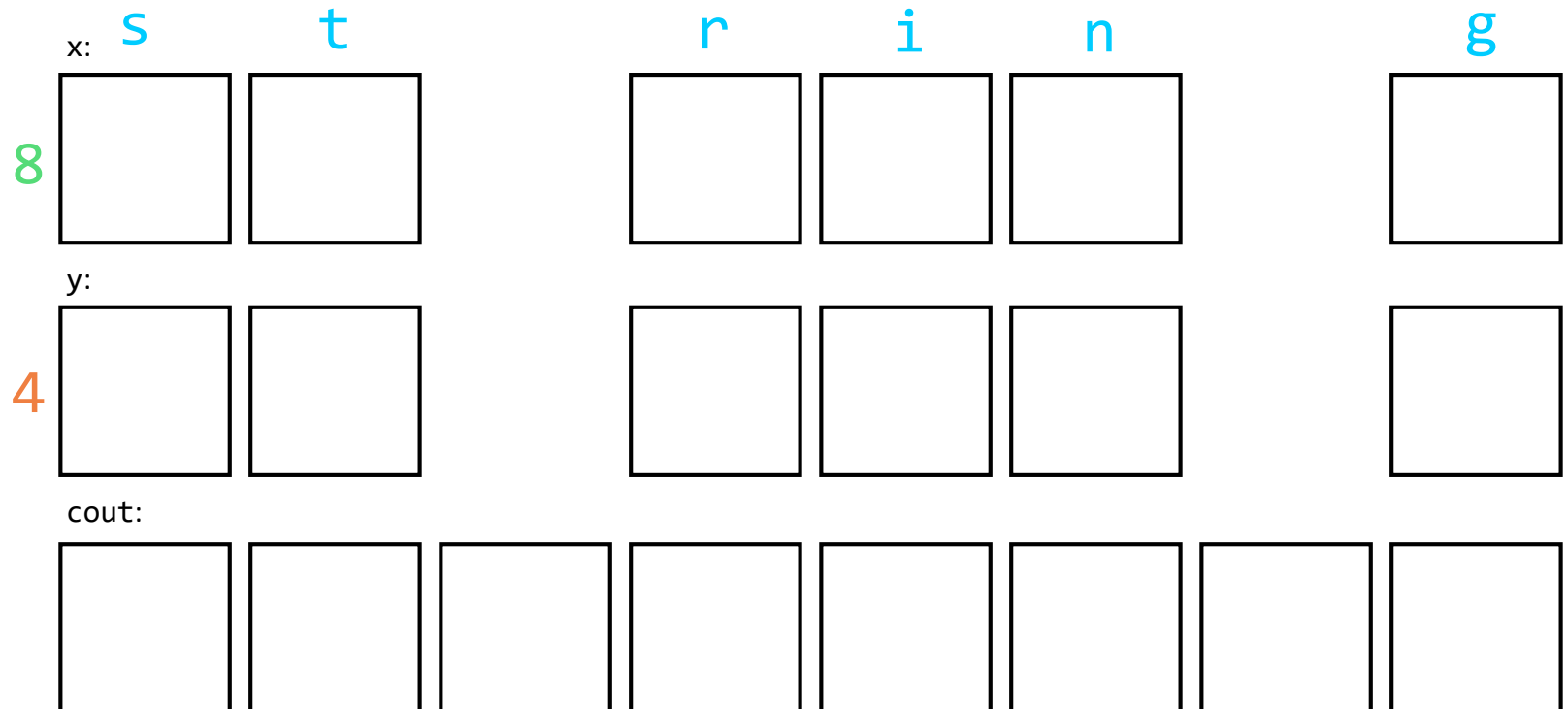
Arbeitsgruppe Systemsoftware
Angewandte Informatik 12

```
unsigned int gcd(unsigned int n,  
                unsigned int m) {  
  
    unsigned int e;  
  
    do {  
        e = n % m;  
        n = m;  
        m = e;  
    } while (m != 0);  
  
    return n;  
}
```

```
unsigned int gcd(unsigned int n,  
                unsigned int m) {  
  
    unsigned int e;  
  
    e = n * m;  
    n = e / gcd(m, n);  
  
    return n;  
}
```

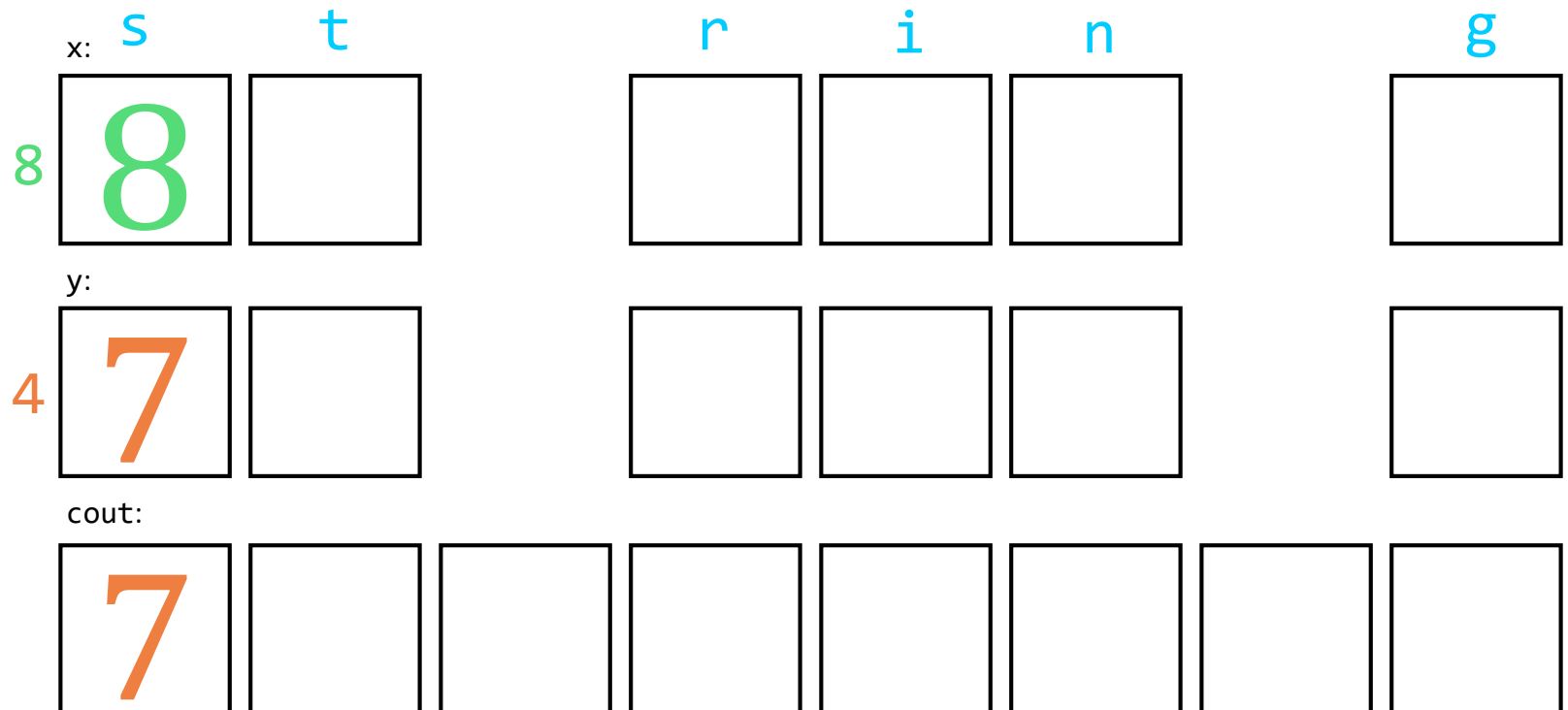
```
int main() {  
    char arr[] = "string";  
    int y = 4;  
    for (int i = 0; arr[i] != '\0'; i++) {  
        switch (arr[i]) {  
            case 'r':  
                break;  
            case 't':  
                y = y - 3;  
                x = x / 2;  
                printf("%d ", x);  
            case 'i':  
                y = y - 1;  
            case 's':  
                y = y + 3;  
                break;  
            case 'g':  
                f1(y);  
                break;  
            default:  
                f2(y);  
                printf("%d ", x);  
                break;  
        }  
        printf("%d ", y);  
    }  
    printf("\n\n"); return 0;  
}
```

```
int x = 8;  
  
void f1(int& y) { y = y - 3; }  
void f2(int& y) {  
    int x = y--;  
    y = y + x - 7;  
}
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                y = y + 3;
                break;
            case 'g':
                f1(y);
                break;
            default:
                f2(y);
                printf("%d ", x);
                break;
        }
        printf("%d ", y);
    }
    printf("\n\n"); return 0;
}

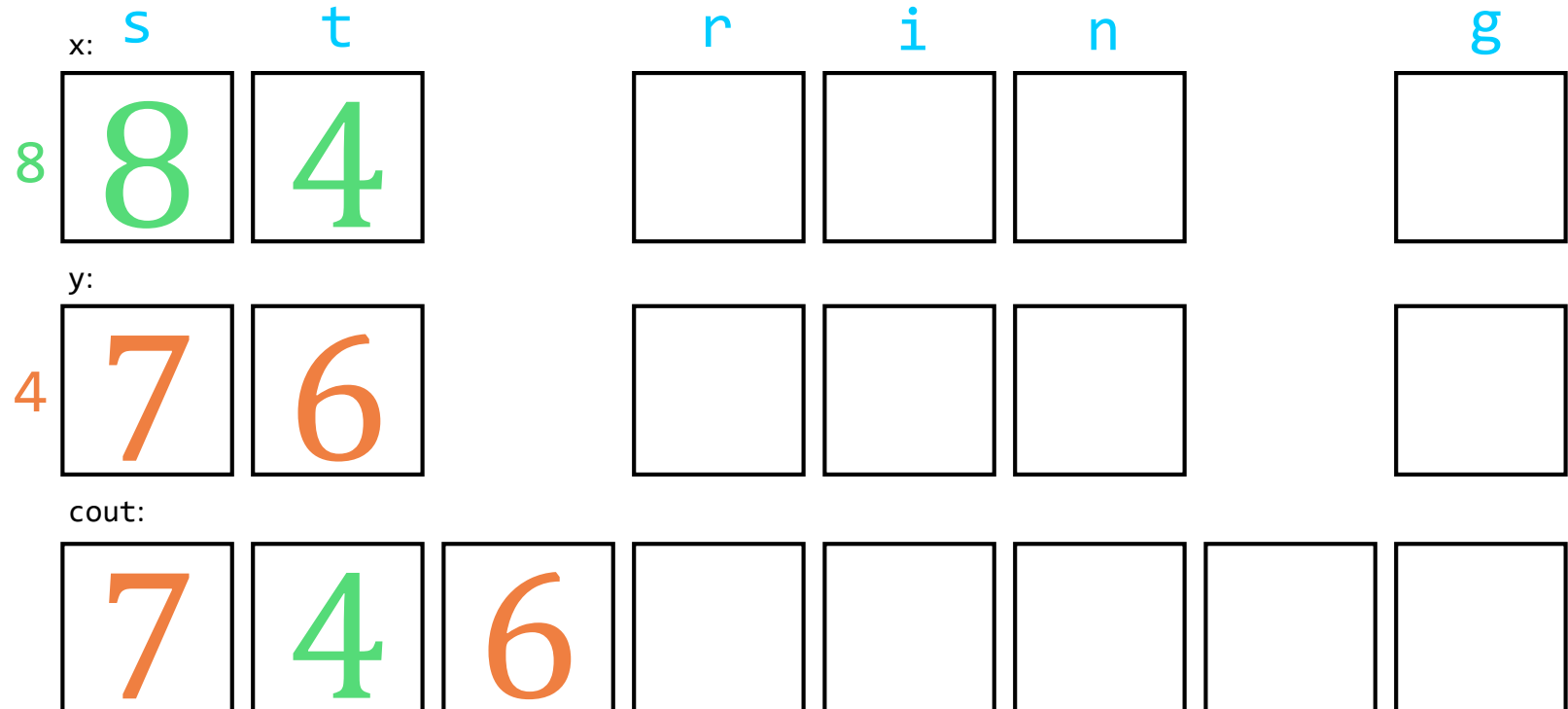
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```

	s		t		r		i		n		g	
x:	8	8	4		4							
y:	4	7	6		6							
cout:		7	4	6	6							

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x:	8	8	4		4	4			
y:	4	7	6		6	8			
cout:		7	4	6	6	8			

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                f2(y);
                printf("%d ", x);
                break;
        }
        printf("%d ", y);
    }
    printf("\n\n"); return 0;
}

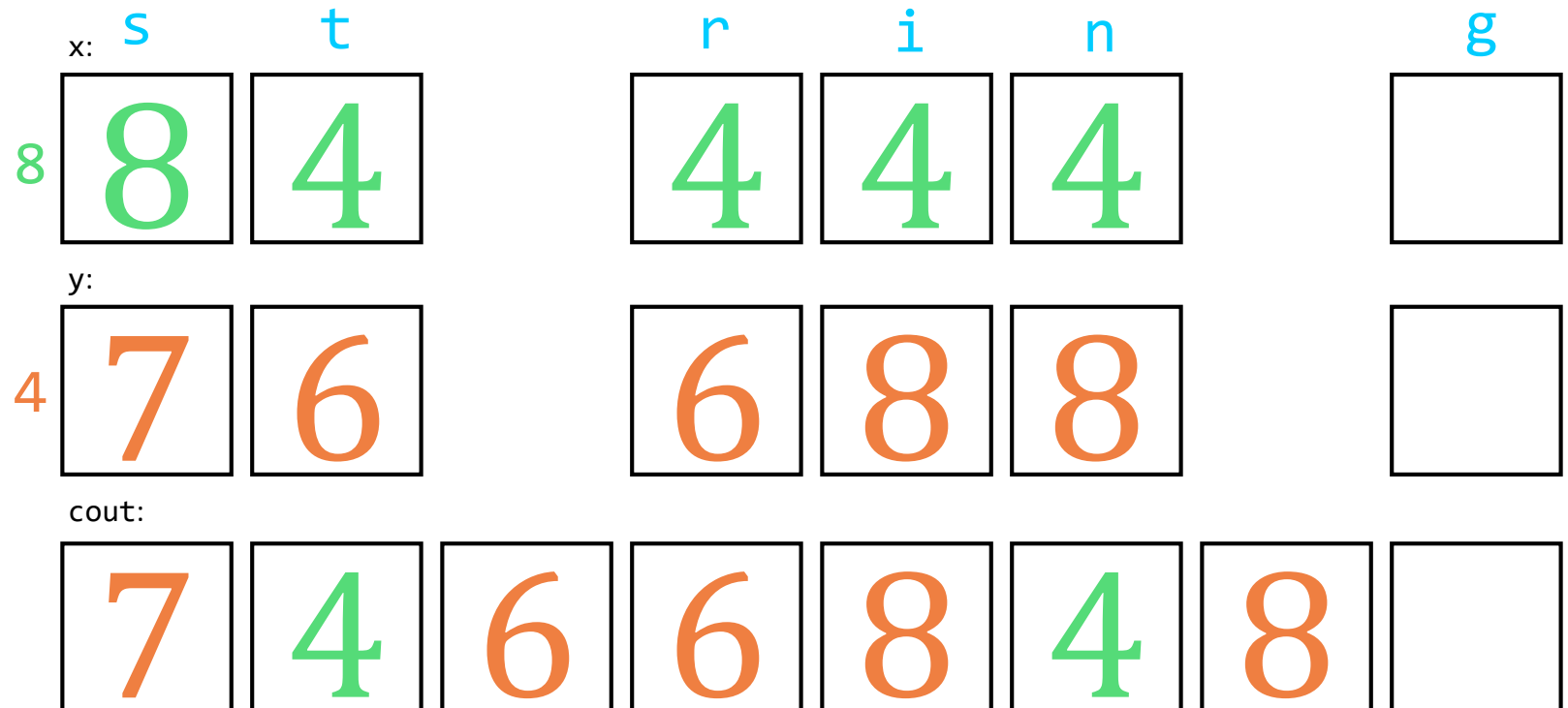
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```

	s	t		r	i	n		g
x:	8	4		4	4	4		4
y:	7	6		6	8	8		5
cout:	7	4	6	6	8	4	8	5