The source code and questions in the screening task and the main comprehension task

As described in Subsection 3.8, we prepared three versions of source code (Xp1, Xp2, and Xp3) for the screening task.

Code Pattern A questions

- A_v

  Correct Answer: 3, 5

```
void main() {
   int V1 = 2;
    int V2 = 3 + V1++;
    printf("%d, %d\n", V1, V2);
}
```

  ○ 2, 5
  ○ 2, 6
  ○ 3, 3
  ○ 3, 5
  ○ 3, 6

- A_c

  Correct Answer: 3, 5

```
void main() {
   int V1 = 2, V2;
    V2 = V1 + 3;
    V1++;
    printf("%d, %d\n", V1, V2);
}
```

  ○ 2, 5
  ○ 2, 6
  ○ 3, 3
  ○ 3, 5
  ○ 3, 6

- A_p1

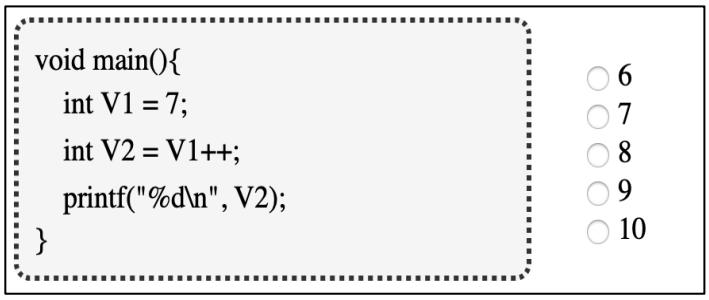
  Correct Answer: 5

```
void main(){
   int V1 = 5;
   int V2 = V1++;
   printf("%d\n", V2);
}
```

  ○ 4
  ○ 5
  ○ 6
  ○ 7
  ○ 8

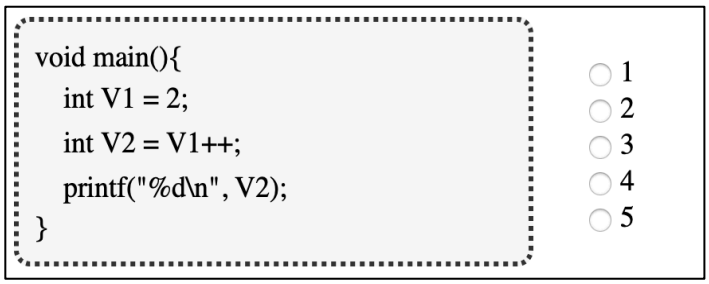
- A_p2

  Correct Answer: 7



- A_p3

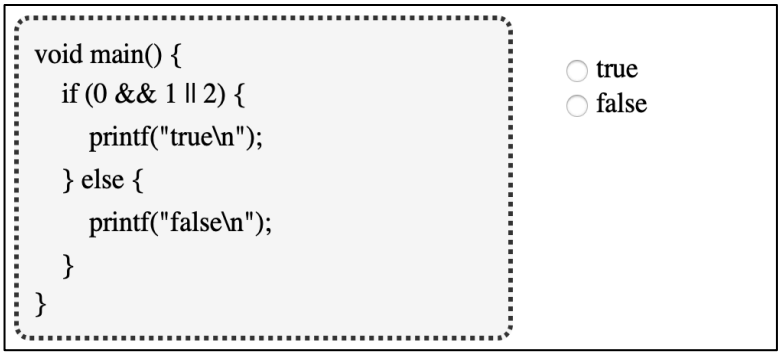
  Correct Answer: 2



Code Pattern B questions

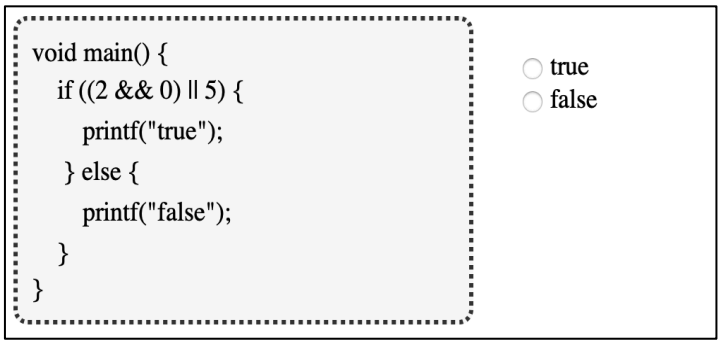
- B_v

  Correct Answer: true



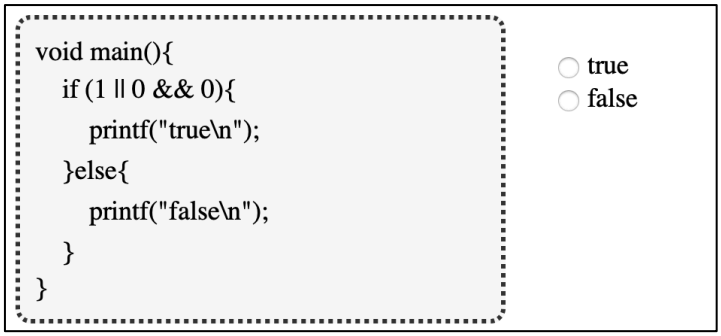
- B_c

  Correct Answer: true



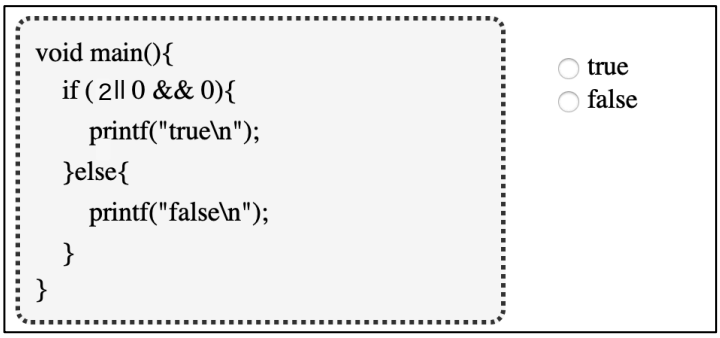
- B_p1

  Correct Answer: true



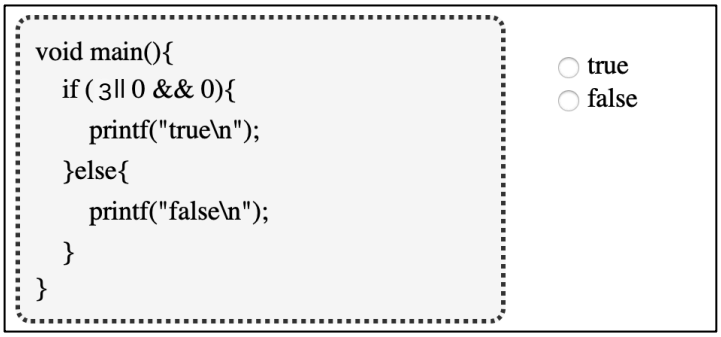
- B_p2

  Correct Answer: true



- B_p3

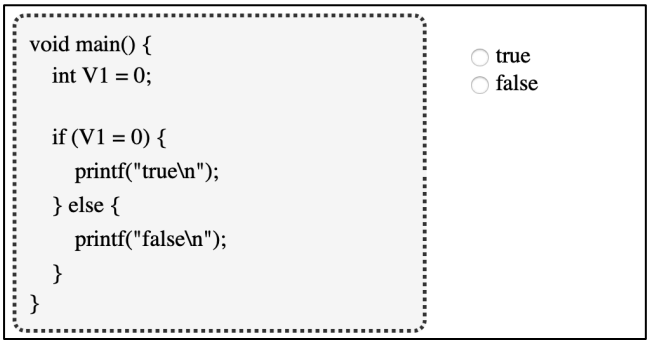
  Correct Answer: true



Code Pattern C questions

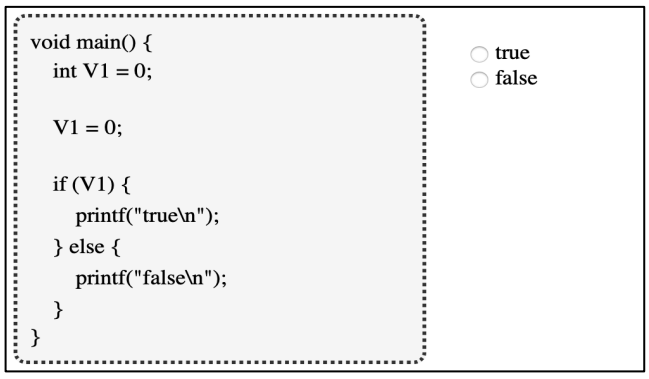
- C_v

  Correct Answer: false



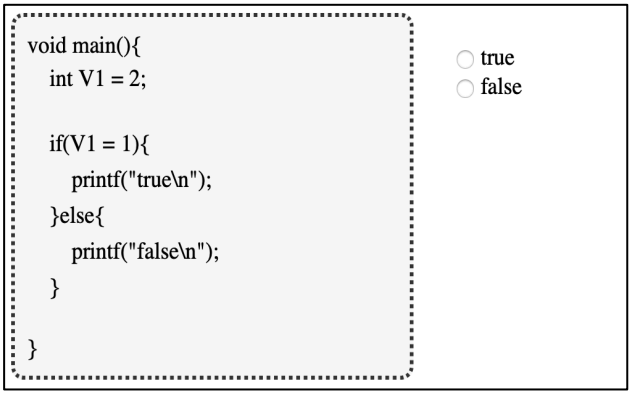
- C_c

  Correct Answer: false



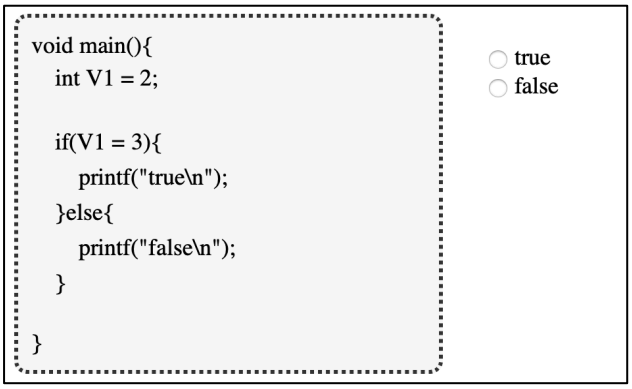
- C_p1

  Correct Answer: true



- C_p2

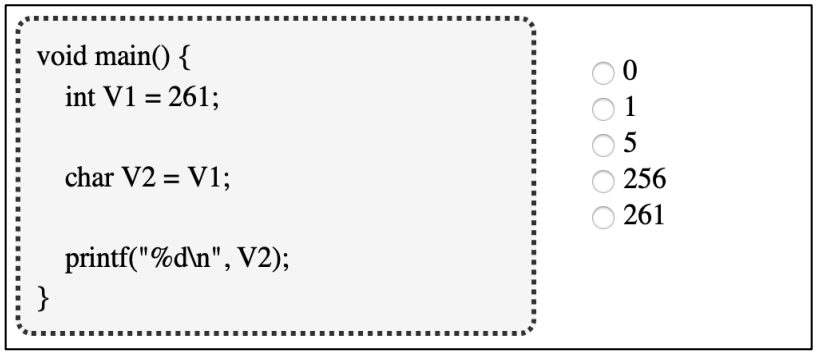
  Correct Answer: true



Code Pattern D questions

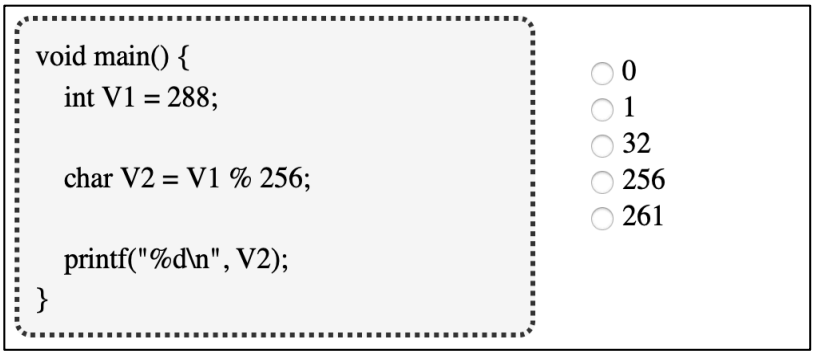
- D_v

  Correct Answer: 5



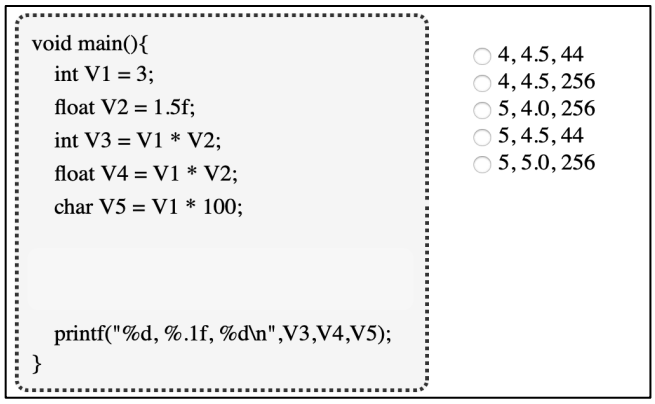
- D_c

  Correct Answer: 32



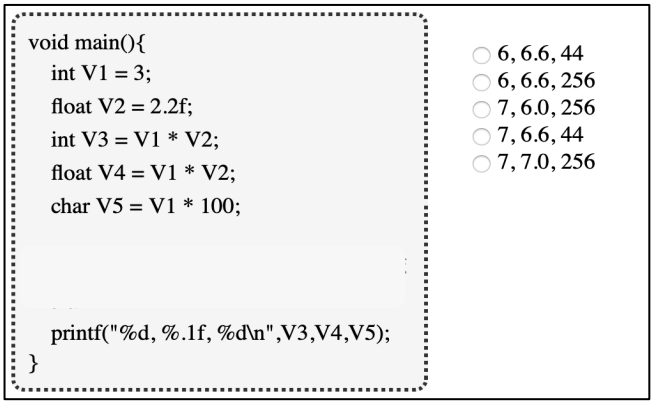
- D_p1

  Correct Answer: 4, 4.5, 44



- D_p2

  Correct Answer: 6, 6.6, 44



- D_p3

  Correct Answer: 9, 9.9, 44

```
void main(){
   int V1 = 3;
   float V2 = 3.3f;
   int V3 = V1 * V2;
   float V4 = V1 * V2;
   char V5 = V1 * 100;



   printf("%d, %.1f, %d\n",V3,V4,V5);
}
```

- 9, 9.9, 44
- 9, 9.9, 256
- 10, 9.0, 256
- 10, 9.9, 44
- 10, 10.0, 256

Code Pattern E questions

- E_v

  Correct Answer: false

```
void main(){
   int V1 = 10;
   int V2 = 3;
   if (! (V1 % V2)){
      printf("true\n");
   }
   else{
      printf("false\n");
   }
}
```

- true
- false

- E_c

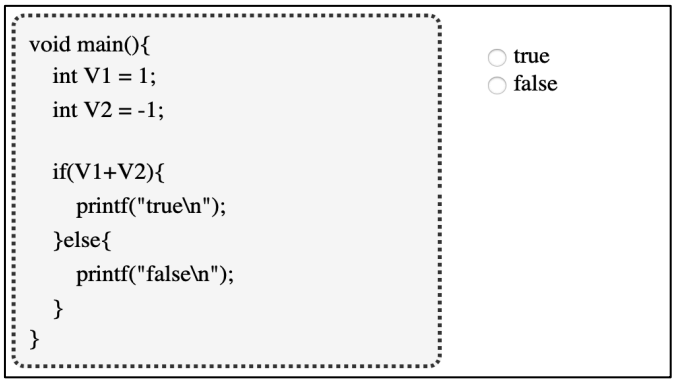
  Correct Answer: false

```
void main(){
   int V1 = 1, V2 = 2;
   if ( (V2 - V1) == 0){
      printf("true\n");
   }else{
      printf("false\n");
   }
}
```

- true
- false

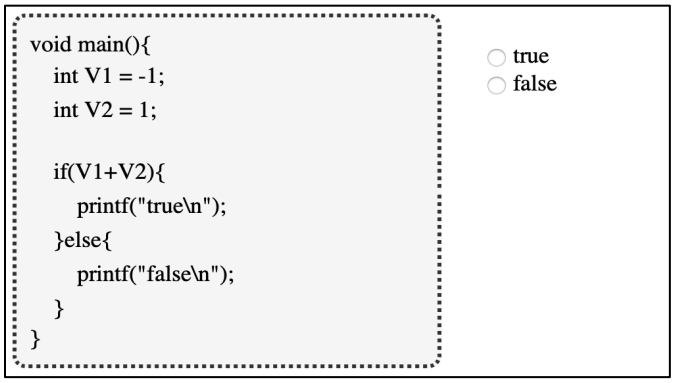
- E_p1

  Correct Answer: false



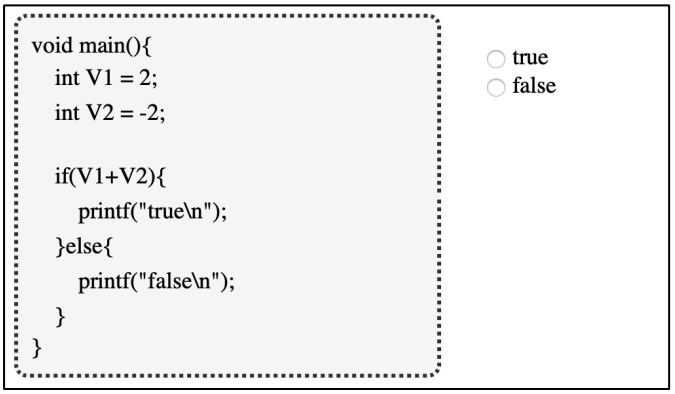
- E_p2

  Correct Answer: false



- E_p3

  Correct Answer: false



Code Pattern F questions

- F_v

  Correct Answer: 5, 3

```
void main() {
   int V1 = 4;
   int V2 = 0;

   while (V2 < 3) V2++; V1++;

   printf("%d, %d\n", V1, V2);
}
```

  - 5, 2
  - 5, 3
  - 6, 2
  - 7, 2
  - 7, 3

- F_c

  Correct Answer: 8, 3

```
void main() {
   int V1 = 7;
   int V2 = 1;

   while (V2 < 3) { V2++; } V1++;

   printf("%d, %d\n", V1, V2);
}
```

  - 8, 1
  - 8, 2
  - 8, 3
  - 9, 2
  - 9, 3

- F_p1

  Correct Answer: 2

```
void main() {
   int V1 = 1;

   if (V1 == 2) V1++; V1++;

   printf("%d\n", V1);
}
```

  - 0
  - 1
  - 2
  - 3
  - 4

- F_p2

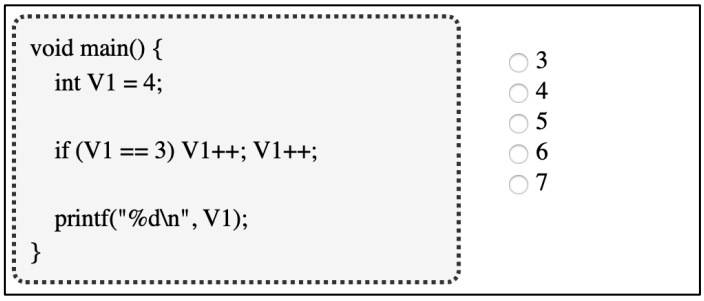
  Correct Answer: 3

```
void main() {
   int V1 = 2;

   if (V1 == 3) V1++; V1++;

   printf("%d\n", V1);
}
```

  - 1
  - 2
  - 3
  - 4
  - 5

- F_p3

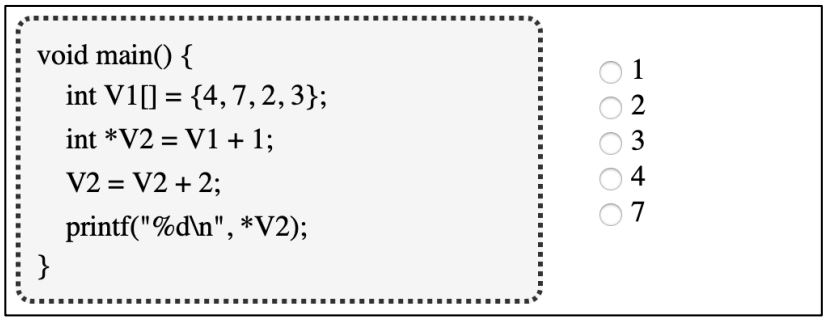
  Correct Answer: 5



Code Pattern G questions

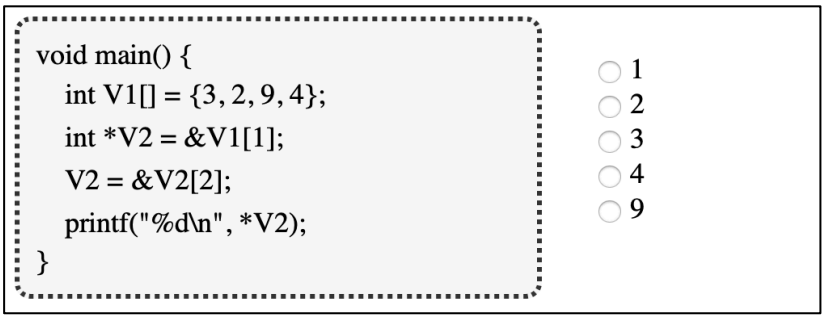
- G_v

  Correct Answer: 3



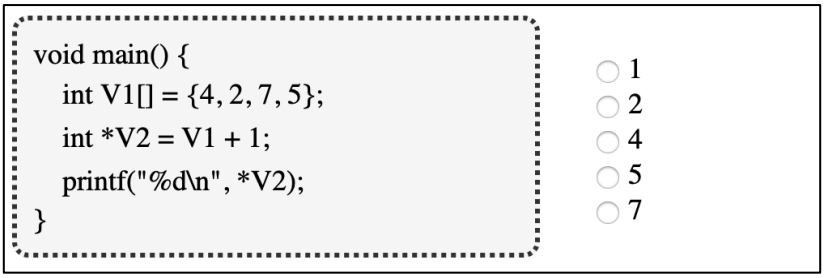
- G_c

  Correct Answer: 4



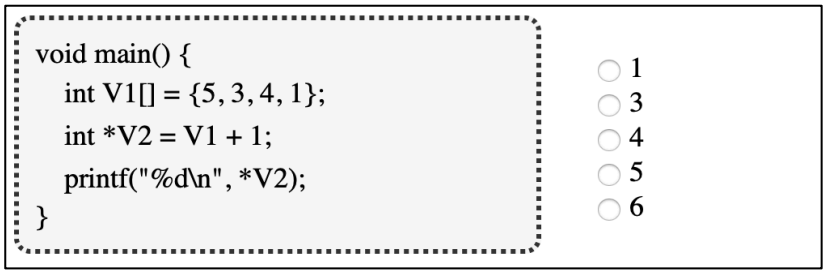
- G_p1

  Correct Answer: 2



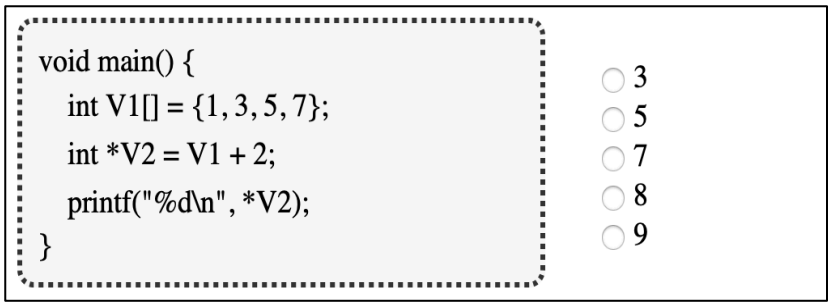
- G_p2

  Correct Answer: 3



- G_p3

  Correct Answer: 5



Code Pattern H questions

- H_v

  Correct Answer: 7, 7

```
void main() {
   int V1 = 3;
   int V2 = (V1 = V1*2, V1 = V1+1);

   printf("%d, %d\n", V1, V2);
}
```

  - 3, 4
  - 4, 4
  - 6, 6
  - 7, 6
  - 7, 7

- H_c

  Correct Answer: 2, 1

```
void main() {
   int V1, V2;

   V1 = 2;
   V2 = 1;

   printf("%d, %d\n", V1, V2);
}
```

  - 1, 1
  - 1, 2
  - 2, 1
  - 2, 2
  - 2, 3

- H_p1

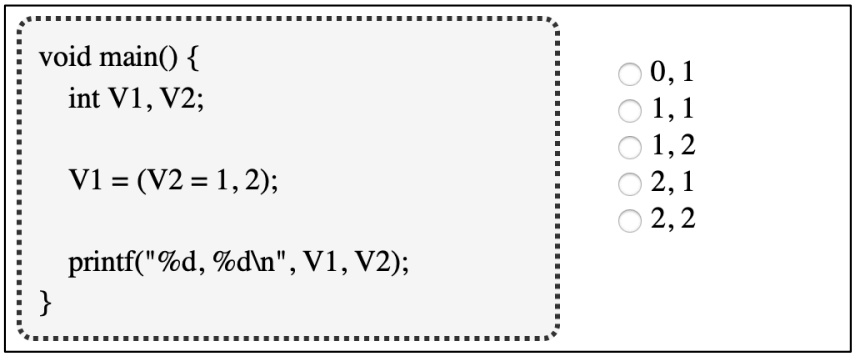
  Correct Answer: 1, 3

```
void main() {
   int V1, V2;

   V1 = (V2 = 3, 1);

   printf("%d, %d\n", V1, V2);
}
```

  - 3, 3
  - 3, 1
  - 0, 3
  - 1, 3
  - 1, 1

- H_p2

  Correct Answer: 2, 1



- H_p3

  Correct Answer: 3, 2