

Part B

(2) /*

```
module my_firstmodule (input A, input B, output C);
```

```
and(C, A, B);
```

```
endmodule
```

*/

(3) /*

```
module my_firstmodule (input A, input B, output C);
```

```
assign C = A | B;
```

```
endmodule
```

*/

(4) /*

```
module my_firstmodule (input A, input B, output C);
```

```
assign C = A ^ B;
```

```
endmodule
```

*/

Part C

```
/*  
module my_firstmodule (input A, input B, input C, output D);  
assign D = (A & B) | (B & C) | (A & C);  
endmodule  
*/
```

-> above Verilog code is a 3 input majority gate, that is if at least 2 inputs (out of A, B, C) are 1, then output D will be equal to 1.