Problem 1: **output:** undefined

```
Void main1 (){          //variable is declared inside the if statement.
If(true)
{
Int number=42;
}
Print(number);
}
Main1();
```

Problem 2: **output:** undefined

```
void main2(){               //variable is declared inside the  if statement.
int value;
if(false){
value=100;
}
Print(value);
}
Main2();
```

Problem 3: **output**: 5

```
Int count=5;
Void main3(){
Int count=10;
Print(count);
}
Main3();
```

Problem 4: **output:**Loop $i

Loop $i

Loop $i

```
Void main4(){
For(int i=0;i<3;i++){
String message=”Loop $i”;
Print(message);
}
Print(message);
}
Main4();
```

Problem 5: **output:** undefined //print st is there before the declaration;

```
Void processNumber(int num){
Num=num+1;
}
Void main5(){
Print(num);
Int x=5;
processNumber(x);
print(x);
}
Main5();
```


Problem 6: **output:** false

```
Void main6(){
Bool isActive= false;
If(true)
```

```
{
boolisActive=true;
print(isActive);
}
Print(isActive);
}
Main6();
```

Problem 7: **output: 50**

```
Void main7(){                    0
Int result=0;
{
Int result=50;
Print(result);
}
Print(result);
}
Main7();
```

Problem 8: **output:** undefined

```
Void main8(){
If(true)
{
String name=”alice”;          //the variable is declared inside the func cannot
}else{                         be accessed outside
String name=”bob”;
}
Print(name);
```

```
}
Main8();
```

Problem 9: **output:** 18

```
Double price=9.99;
Void applyDiscount(){
Price=price * 0.9;
}
Void main9(){
Double price=20.00;
applyDiscount();
print(price);
}
Main9();
```

Problem 10: **output:**

```
Void main10(){                    //declaration should be outside the loop
While(true)
{
Int counter=0;
Counter ++;
Print(counter);
Break;
}
Print(counter);
}
Main10();
```

Problem 11: **output: 15**

```
Void updatevalue(int val){
Val = 50;
}
Void main11(){
Int x=10;
If(x>0)
{
Updatevalue(x);
Int y=x+5;
}
Print(y);
}
Main11();
```

Problem 12: **output: active**

```
String status=”idle”;
Void togglestatus(){
String status=”active”;
}
Void main12()
{
Togglestatus();
Print(status);
}
Main12();
```

Problem 13: **output:10**

```
Void main13(){
```

```
Bool flag=false;
Void innerfunc(){
Flag=true;
Int count=10;
}
Innerfunc();
Print(count);
}
Main13();
```

Problem 14: **output:positive**

```
Void compute(int num)
{
If(num>0){
String message=”positive”;
}
}
Void main14(){
Compute(5)
Print(message);
}
Main14();
```

Problem 15: **output:50**

```
Int score=100;
Voi resetscore(){
Score=0;
}
```

```
Void adjustscore(){
Int score=50;
Resetscore();
}
Void main15(){
Adjustscore();
Print(score);
}
Main15();
```

Problem 16: **output:15.0**

```
Void main16(){
Double average=0.0;
{
Int count=3;
{
Double total=15.0;
Average=total/count;
}
Print(total);
}
Print(average);
}
```

5.0

Problem 17:

```
Void increment(int value){
Value += 1;
}
```

```
Void main17(){
Int sum=0;
For(int i=0;i<3;i++)
{
Increment(i);
If(i==2){
Bool done=true;
Sum += I;
}
}
Print(done);
}
Main17();
```