1. What is the output of below program

**public** **class** OverloadingWrtVarArgs {

**public** **void** m1(**int**... a) {

System.***out***.println("var-args method");

}

**public** **void** m1(**int** a) {

System.***out***.println("primitive method");

}

**public** **static** **void** main(String[] args) {

OverloadingWrtVarArgs o = **new** OverloadingWrtVarArgs();

o.m1(1);

}

}

1. var-args method
2. primitive mehod
3. Ambiguity error
4. None of the above

2.What is the output of below program

**public** **class** OverladingWrtWrapper {

**public** **void** m1(Integer a) {

System.***out***.println("wrapper method");

}

**public** **void** m1(**int** a) {

System.***out***.println("primitive method");

}

**public** **static** **void** main(String[] args) {

OverladingWrtWrapper o = **new** OverladingWrtWrapper();

o.m1(1);

}

}

1. wrapper method
2. primitive mehod
3. Ambiguity error
4. None of the above

3.What is the output of below program

**public** **class** OverloadingWrtWrapperAndVarArg {

**public** **void** m1(**int**... a) {

System.***out***.println("var-args method");

}

**public** **void** m1(Integer a) {

System.***out***.println("wrapper method");

}

**public** **static** **void** main(String[] args) {

OverloadingWrtWrapperAndVarArg o = **new** OverloadingWrtWrapperAndVarArg();

o.m1(0);

}

}

1. wrapper method
2. var-args mehod
3. Ambiguity error
4. None of the above

4.What is the output of below program

**public** **class** OverlaoadingWrtParentAndChildAsParameter {

**public** **void** m1(Number a) {

System.***out***.println("Number class method");

}

**public** **void** m1(Integer a) {

System.***out***.println("Integer class method");

}

**public** **static** **void** main(String[] args) {

Number a = **new** ~~Integer~~(1);

Integer i = **new** ~~Integer~~(10);

OverlaoadingWrtParentAndChildAsParameter o = **new** OverlaoadingWrtParentAndChildAsParameter();

o.m1(a);

o.m1(i);

o.m1(**null**);

}

}

1. Integer class method Number class method Number class method
2. Number class method Integer class method Integer class method
3. Ambiguity error
4. None of the above

Explaination: first priority is given to child here null is compatible with parent and child child will get first priority

5.What is the output of below program

**public** **class** OverloadingWrtCommonParameter {

**public** **void** m1(String a) {

System.***out***.println("String class method");

}

**public** **void** m1(Integer a) {

System.***out***.println("Integer class method");

}

**public** **static** **void** main(String[] args) {

OverloadingWrtCommonParameter o= **new** OverloadingWrtCommonParameter();

o.m1(1);

o.m1("abc");

o.m1(**null**);

}

}

1. Integer class method String class method Integer class method
2. Integer class method String class method String class method
3. Ambiguity error
4. None of the above

Explainnation :AS both string and integer are compatible with null value and there is inter relation beteen two class will get ambiguity error

6.What is the out of below program

**public** **class** OverloadingWrtRuntimeObject {

**public** **void** m1(String a) {

System.***out***.println("String class method");

}

**public** **void** m1(Integer a) {

System.***out***.println("Integer class method");

}

**public** **static** **void** main(String[] args) {

String s = **new** String();

CharSequence ch = **new** String();

Integer i = 10;

Number n = 10;

OverloadingWrtRuntimeObject o = **new** OverloadingWrtRuntimeObject();

o.m1(i);

o.m1(s);

o.m1(n);

o.m1(ch);

}

}

1. String class method Integer class method String class method Integer class method
2. Integer class method String class method Integer class method String class method
3. Ambiguity error
4. None of the above

Ans d

Explaination In overloading method resolution is taken care by the reference not the object as we don’t have CharSequene and Number reference as the method parameters We get compilation error

7.What is the output of below program

**class** Parent {

}

**class** Child **extends** Parent {

}

**public** **class** OverloadingWrtParentAndChildAsParam1 {

**public** **void** m1(Parent p) {

System.***out***.println("parent method");

}

**public** **void** m1(Child c) {

System.***out***.println("child method");

}

**public** **static** **void** main(String[] args) {

Parent p = **new** Parent();

Child c = **new** Child();

Parent p1 = **new** Child();

OverloadingWrtParentAndChildAsParam1 o = **new** OverloadingWrtParentAndChildAsParam1();

o.m1(p);

o.m1(c);

o.m1(p1);

o.m1(**null**);

}

}

1. parent method child method parent method child method
2. parent method child method child method child method
3. Ambiguity error
4. None of the above

Ans a

Explaianation : When weare having parent reference and cild object while method resolution reference will be considered and null is compatible for both parent and child classes but child will be given priority

8.What is the output of below program

**public** **class** AutoPromotionDemo {

**public** **void** m1(**int** a) {

System.***out***.println("int method");

}

**public** **void** m1(**float** f) {

System.***out***.println("float method");

}

**public** **static** **void** main(String[] args) {

AutoPromotionDemo a= **new** AutoPromotionDemo();

a.m1(0);

a.m1(0f);

a.m1('c');

}

}

1. int method float method int method
2. int method float method float method
3. Compilation error
4. None of the above

Ans auto promotion cocept applicable here and char can be stored in int as well as float but immediate to char is int

9.What is the output of below program

**public** **class** AutoPromotionDemoWrtObject {

**public** **void** m1(CharSequence ch) {

System.***out***.println("Charsequence method");

}

**public** **void** m1(Number n) {

System.***out***.println("number method");

}

**public** **static** **void** main(String[] args) {

Integer i = 10;

Number n = 10;

String s = "abc";

CharSequence ch = "abc";

AutoPromotionDemoWrtObject a = **new** AutoPromotionDemoWrtObject();

a.m1(ch);

a.m1(n);

a.m1(i);

a.m1(s);

}

}

1. Charsequence method number method number method charsequence method
2. Compilation error
3. Runtime Error
4. None of the above

10.What is the output of below program

**public** **class** AutoPromotionAmbiguityDemo {

**public** **static** **void** m1(**int** a, **float** b) {

System.***out***.println(a + b);

}

**public** **static** **void** m1(**float** a, **int** b) {

System.***out***.println(a - b);

}

**public** **static** **void** main(String[] args) {

*m1*(10f, 12);

*m1*(4, 5f);

*m1*(10, 10);

}

}

1. -2.0 9.0 20.0
2. -2.0 9.0 0.0
3. Compilation error
4. None of the above

11.What is the output of below program

**public** **class** MainMethodOverlaoding {

**public** **static** **void** main(String[] args) {

System.***out***.println("String args");

}

**public** **static** **void** main(Integer[] args) {

System.***out***.println("integer args");

}

}

1. String args integer args
2. Integer args string args
3. String args
4. Integer args