ITS1010 - Programming Fundamentals – Assignment 06
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1. a. public static void myMethod() { } ; - error: reached end of file while parsing
public static void myMethod() { }

b. public static void main() { } - error: reached end of file while parsing
public static void main(String[]args) { }

c. public void static subMethod( ); - error: '(' expected
public void static subMethod( );
^
error: invalid method declaration; return type required
public void static subMethod( );
^
error: examplereached end of file while parsing
public void static subMethod( );
^

public static void subMethod( ){}

d. public static void () { } - error: <identifier> expected
public static void () { }
^

public static void abc () { }

e. public static void_(); - error: invalid method declaration; return type required
public static void_();
^

public static void_ abc ()

f. public static void _(){} - error: as of release 9, '_' is a keyword, and may not be used as an identifier
public static void _(){}
^

g. public static void myMethod(int x;){ } - error: ',', ')', or '[' expected
public static void myMethod(int x;){ }
^
error: illegal start of type
public static void myMethod(int x;){ }
^

h. public static void myMethod(x) { } - error: <identifier> expected
public static void myMethod(x) { }

^

I. public static void myNewMethod(100) { } - error: illegal start of type
public static void myNewMethod(100) { }
^

j. public static void m(int a){return 0;} - error: incompatible types: unexpected return value
public static void m(int a){return 0;}
^

k. public static void m1(){return;} - legal

l. public static int me(int a){return 0;} - legal

---

2. printName(“CMJD”); //Line 2 - error: illegal character: '\u201c'
printName(“CMJD”);
^
error: illegal character: '\u201d'
printName(“CMJD”);
^
error: not a statement
printName(“CMJD”);
^

printName(CMJD); //Line 2

Example.printName(“IJSE”); //Line 3 - error: illegal character: '\u201c'
Example.printName(“IJSE”);
^

error: illegal character: '\u201d'
Example.printName(“IJSE”);
^
error: not a statement
Example.printName(“IJSE”);
^

Example.printName(IJSE); //Line 3

MyClass.printName(“CMJD”);//Line 6 - error: illegal character: '\u201c'
MyClass.printName(“CMJD”);
^
error: illegal character: '\u201d'
MyClass.printName(“CMJD”);
^
error: not a statement
MyClass.printName(“CMJD”);
^

```
 MyClass.printName(CMJD);//Line 6
```

```
3. import java.util.*;
    class example{
        public static void main(String args[]){

                total();
        }

         public static void total(){
        Scanner scan =new Scanner(System.in);
                int total=0;
       double avg=0;

   for(int i =1;i<=10;i++){
                System.out.print("Enter subject marks: ");
                  int sub = scan.nextInt();
                  total+=sub;

     avg=(double)total/10.0;

       }
     System.out.println("Total : "+total);

     System.out.println("Average: "+avg);
    }  }
```

```
4. import java.util.*;
    class example{
        public static void main(String args[]){
        max();
     }
      public static void max(){
           Scanner scan =new Scanner(System.in);
                System.out.print("input number 01 : ");
     int nu1 =scan.nextInt();

     System.out.print("input number 02 : ");
     int nu2 =scan.nextInt();

     System.out.print("input number 03 : ");
    int nu3 =scan.nextInt();

   if(nu1>nu2 |nu1>nu3){
      System.out.println("maximum number is :"+nu1);
```

```
        }else if(nu2>nu3){

       System.out.println("maximum number is :"+nu2);}

      else{System.out.println("maximum number is :"+nu3);}

          }             }
```

5.
```
import java.util.*;
   class example{
        public static void main(String args[]){
        area();

        }
   public static void area(){
         Scanner scan =new Scanner(System.in);

   System.out.print("input radius : ");
  double radius =scan.nextDouble();

  double area =(22.0/7.0) * (radius* radius);
  System.out.println("area is "+area);
  }  }
```

6.
```
import java.util.*;
class example{

        public static void main(String args[]){
                getDigitCount();
        }

        public static void getDigitCount() {
                Scanner input = new Scanner(System.in);

                System.out.print("Input a number: ");
                int num = input.nextInt();

                int total = 0;
                while(num != 0) {
                        int rem = num % 10;
                        num /= 10;
                        total += rem;
                }
                System.out.print("Digit Total: " + total);
```

```
        }}
```

```
 7. import java.util.*;
    class example{
        public static void main(String args[]){
        reverse();
                }
      public static void reverse(){
     Scanner scan =new Scanner(System.in);
     System.out.print(" input number    :");
       int num =scan.nextInt();
       int reverse =0;
       while(num != 0){
                        int i = num % 10;
                           reverse = reverse * 10 +i;
                           num /= 10;
                        }
       System.out.print(" reverse is  " +reverse);
          } }
```

```
8. import java.util.*;
class example{

   public static void main(String[]args){
          armstrong();
        }
        public static void armstrong(){
Scanner scan = new Scanner(System.in);
System.out.print("Input number : ");
      int num = scan.nextInt();

      int temp,temp2;
          temp2=temp=num;
      int count=0;
      int total=0;

   while(num!=0){
             num /= 10;
             count++;
  }
   while(temp!=0){
             int rem=temp%10;
             int pow=1;
             int count2=1;
```

```
        while(count2<=count){
             pow *= rem ;
             count2++;
        }
        total += pow;
         temp /= 10;
   }
   if(total==temp2){
            System.out.print(temp2+" is a armstrong number");
   }
   else {
        System.out.print(temp2+" is not a armstrong number");
           }
        }
   }
```

```
9. import java.util.*;
class example{
public static void main(String[]args){
          smallest();
        }

        public static void smallest(){
       int i=1;
   while(true){
      if(i%1==0&&i%2==0&&i%3==0&&i%4==0&&i%5==0&&i%6==0&&i
%7==0&&i%
        8==0&&i%9==0&&i%10==0&&i%11==0&&i%12==0&&i%13==0&&i
%14==0&&i%
        15==0&&i%16==0&&i%17==0&&i%18==0&&i%19==0&&i%20==0){
         System.out.print(i+" is smallest number");
                    break;
                    }
        i++;
        }
}}
```

```
10. import java.util.*;
class example{
  public static void main(String[]args){

        year();
}
```

```
 public static void year(){
  Scanner scan=new Scanner(System.in);

    System.out.print("input year : ");
      int year =scan.nextInt();
          year= year % 4;
  if(year==0){
     System.out.println("leap year");
 }
  else{System.out.println(" not leap year");
        }
  }
}
```

```
11.  import java.util.*;
  class demo12{
        public static void main(String[] args) {


   int i = 1, n = 10, firstTerm = 0, secondTerm = 1;


   while (i <= n) {
     System.out.print(firstTerm + ", ");

     int nextTerm = firstTerm + secondTerm;
     firstTerm = secondTerm;
     secondTerm = nextTerm;

     i++;
   }
  }
}
```

```
12.myMethod;   //Line 2                    error: not a statement
                                            myMethod;
                                             ^
   * myMethod();  //Line 2

    myMethod(){}  //Line 4                  error: ';' expected
                                             myMethod(){ }
                                                  ^
   * myMethod();    // Line 4
```

myMethod(){ }; //Line 5

error: ';' expected
myMethod(){ };
^

* myMethod();//Line 5

Example.myMethod();//Line 6

error: cannot find symbol
Example.myMethod();
^

* myMethod(); //Line 6

System.out.println(myMethod()); //Line 8

error: 'void' type not allowed here
System.out.println(myMethod());
^

*System.out.println("myMethod()"); //Line 8

---

13. return x,y; //Line 8

```
14. import java.util.*;
class example{
 public static void main(String args[]){
        palindrome();


        }
         public static void palindrome(){
          Scanner input = new Scanner(System.in);

              System.out.print("Input a number: ");
              int num = input.nextInt();      //256

              int temp = num;

              int newValue = 0;

              while(num != 0) {
                    int remain = num % 10;
                    newValue = (newValue*10) + remain;
                    num /= 10;
              }

              if(temp == newValue) {
                    System.out.println(temp + " is a palindrome");
              } else {
                    System.out.println(temp + " is not a palindrome");
              } } }
```

---

15. import java.util.*;

```
class demo12{
public static void main(String args[]){
  Scanner scan =new Scanner(System.in);

       System.out.print("input number    :");
            int num =scan.nextInt();
            int x=0,count=0;
            String y ="",h="";

          while(num!=0){
           x= num%2;
           y=y+x;
           count++;
           num=num/2;
           }
                   count--;
           while(count>=0){
           char o=y.charAt(count);
          h+=o;
          count--;
           }
 System.out.print(h);
           }  }
```

---

16. A. byte y=100;
    B. short y=122;
    C. int y=100;
    H. char y='A';

---

17. C. prints 1 3 5 3 4 6

---

18. C. Prints: 1,2,3,4,5,3

---

19. E. Prints: 1, 2, 3, 4, 9,

20.
```
import java.util.*;
       class example{
 public static boolean isPass(double avg){
if(avg >50){
                  return true;
                  }
```

```
        else{ return   false;}}

 public static void main(String args[]){
Scanner input=new Scanner(System.in);
System.out.print("Input average marks : ");
double avg=input.nextDouble();
System.out.println(isPass(avg) ? "Pass":"Fail");
} }
```

```
21. import java.util.*;
class example{

 public static int abs(int rand){

         if(rand>=0) {
}
return rand;
}
public static void main(String args[]){
Random r=new Random();
for(int i=0; i<10; i++){
        int rand=r.nextInt();
System.out.println("Absolute value of "+rand+" : "+abs(rand));
}   }     }
```

```
22.  import java.util.*;
  class demo12{
          public static boolean isEven(int rand){
                  if(rand% 2 ==0){
                          return true;}
                  else{return false;}
          }
          public static void main(String args[]){
Random r=new Random();
for (int i = 0; i < 10; i++){
int rand=r.nextInt(100);
System.out.println(isEven(rand) ? rand+" is aneven number" : rand+" is an odd number
");  }   }     }
```

```
23.   x : 100
      x : 101
      x : 100
      x : 101
      x : 101
```

---

24. B. return true;
C. return avg>=50;
D. if(avg>=50){return true;}else{return false;}
F. return avg>=50 ? true:false;
G. if(avg>=50){return true;} return false;

---

25. D. public static void myMethod(int x){
System.out.println("myMethod : "+x);
return;
}

G. public static int myMethod(int x){
System.out.println("myMethod : "+x);
return x;
}

---

26. import java.util.*;

```
class example{
        // method 1 comes here
public static String toBinaryString( int num){

            int x=0,count=0;
            String y ="",h="";

         while(num!=0){
          x= num%2;
          y=y+x;
          count++;
          num=num/2;
          }
                  count--;
          while(count>=0){
          char o=y.charAt(count);
         h+=o;
         count--;
          }
 return h;

      }


// method 2 comes here
public static String toOctalString ( int num){
```

```
            int x=0,count=0;
            String y ="",h="";

          while(num!=0){
           x= num%8;
           y=y+x;
           count++;
           num=num/8;
           }
                    count--;
           while(count>=0){
           char o=y.charAt(count);
          h+=o;
          count--;
           }
 return h ;

       }


// method 3 comes here
 public static String toHexString( int num){

     int x=0,count=0;
            String y ="",h="";

          while(num!=0){
           x= num%16;
           y=y+x;
           count++;
           num=num/16;
           }
                    count--;
           while(count>=0){
           char o=y.charAt(count);
          h+=o;
          count--;
           }
 return h ;

       }


public static void main(String args[]){
System.out.println(toBinaryString(100)); //1100100
```

```
System.out.println(toOctalString(100)); //144
System.out.println(toHexString(100)); //64
}
}
```