

## PROGRAMMING ASSIGNMENT - 2

1. Write a Python program to convert kilometers to miles?

```
- import logging as log
- log.basicConfig(filename="programming_assignment_2.log",level=log.DEBUG,format='%(asctime)s
  %(levelname)s %(message)s',force=True)
- def km_to_ml():
-     log.info("Here We Are Trying to Covert Kilometers in Miles")
-     try:
-         k = int(input("Enter the Kilometers : "))
-         log.info("Entered Kilometers is %s",k)
-         m = k * 0.621372
-         log.info("%s Kilometers is Equal to %s Miles\n ", k, m)
-     except ValueError as e:
-         log.error("Enter The Value In Integer Format\n")
-         return "Enter The Value In Integer Format"
-     except Exception as e:
-         log.error("Exception Occured",e)
-     else:
-         return "Miles :", m
-
- Km_to_ml()
```

2. Write a Python program to convert Celsius to Fahrenheit?

```
- import logging as log
- log.basicConfig(filename="programming_assignment_2.log",level=log.DEBUG,format='%(asctime)s
  %(levelname)s %(message)s',force=True)
-
- def cel_to_far():
-     log.info("Converting Celcius to Farenheit")
-     try:
-         log.info("Enter the Celcius Value")
-         c = float(input("Enter The Celcius Data: "))
-         log.info("Entered Celcius Value is: %s",c)
-         f = (c*9/5) + 32
-         log.info("%s Celcius is Equal to %s Farenheit\n",c, f)
-     except ValueError as e:
-         log.exception("Exception:",e)
-     except Exception as e:
-         log.error("Exception :",e)
-     else:
-         return "Farenheit :",f
-
- cel_to_far()
```

3. Write a Python program to display calendar?

```
- import calendar
- import logging as log
- log.basicConfig(filename="programming_assignment_2.log",level=log.DEBUG,format='%(asctime)s
  %(levelname)s %(message)s',force=True)
-
- def calend():
-     log.info("Calendar Viewer")
-     try:
-         log.info("Enter The Year and Month")
-         yy = int(input("Enter The Year: ")) # year
-         mm = int(input("Enter The Month: ")) # month
-         log.info("You Want To See The Calendar For The Year: %s & For The Month :%s",yy,mm)
-         log.debug(calendar.month(yy, mm))
-     except ValueError as e:
-         log.error("Exception",e)
-     except Exception as e:
-         log.error("Exception", e)
-     else:
-         return calendar.month(yy, mm)
-
- calend()
```

4. Write a Python program to solve quadratic equation?

```
- import cmath
- import logging as log
- log.basicConfig(filename="programming_assignment_2.log",level=log.DEBUG,format='%(asctime)s
  %(levelname)s %(message)s',force=True)
-
- def quadratic():
-     log.info("Solving Quadratic Equation")
-     try:
-         log.info("Enter a, b, c Values")
-         a = int(input("Enter a :"))
-         b = int(input("Enter b :"))
-         c = int(input("Enter c :"))
-         log.info("Entered Values are a = %s b = %s c = %s",a, b, c)
-         d = (b**2) - (4*a*c) #Discriminant
-         sol1 = (-b-cmath.sqrt(d))/(2*a)
-         sol2 = (-b+cmath.sqrt(d))/(2*a)
-         log.info("Solutions are: %s & %s", sol1, sol2)
-
-     except Exception as e:
-         log.error("Exception Occured: ", e)
-     else:
-         return "Solutions are : ",sol1, sol2
-
- quadratic()
```

5. Write a Python program to swap two variables without temp variable?

```
- import logging as log
- log.basicConfig(filename="programming_assignment_2.log",level=log.DEBUG,format='%(asctime)s
  %(levelname)s %(message)s',force=True)
-
- def swapping():
-     log.info("Swapping Two Variables Without Using Temp Variable")
-     try:
-         log.info("Enter The Values")
-         a = input("Enter The Value of First Variable: ")
-         b = input("Enter The Value of Second Variable: ")
-         log.info("The Entered Values Are : a = %s & b = %s",a,b)
-         a,b = b,a
-         log.info("After Swapping The Values Are a = %s & b = %s", a, b)
-     except ValueError:
-         log.error("Exception")
-     except Exception as e:
-         log.exception("Exception")
-     else:
-         return "After Swapping : a = {0}, b = {1}".format(a,b)
-     swapping()
```