PYTHON – WORKSHEET 1

1. c
2. d
3. c
4. a
5. d
6. c
7. a
8. c
9. a, c
10. a, b

11.

```
factorial_funcn = lambda n:n-1 + abs(n-1) and f(n-1)*n or 1
factorial_funcn(3)
```

Output: 6

12.

```
def isprime(n):

  _isprime = False

  if n > 1:
    for i in range(2,n):
      if n%2 == 0:
        _isprime = True
        break

  else:
    _isprime = True

  if _isprime:
    print(n,"is not a prime number")
  else:
    print(n,"is a prime number")
```

13.

```
palindrome_fn = lambda x: f”{x} String is Palindrome” if x==x[::-1] else f"{x} String is not a palindrome"
```

14.

```
import math

a,b = [int(x) for x in input("Enter the 2 sides of the traingle").split()]

while True:
    x = input('is one of the side hypotenuse? (yes or no)')
    if x =='yes':
        print(math.sqrt(abs(a*a-b*b)))
        break

    elif x == 'no':
        print(math.sqrt(a*a+b*b))
        break

    else:
        print("invalid option...try again")
```

15.

```
def get_char_freq(input_string):

    for char in input_string:
        if char in frequencies:
            frequencies[char] += 1
        else:
            frequencies[char] = 1
    return frequencies
```