

University Number: _____

ENGG1111 – Quiz
2016/2017
Part B

B1 (4 marks):

Fill in the body of the function below. The function should output all pairs of distinct indices in the array `a` for which the sum equals `S`. The number of elements in the array `a` is given by `length`. Note that the function should output all pair of indices and a pair should appear once only and be displayed with smallest index first.

After you have implemented the function correctly, it will output

```
(0,3)(1,1)(1,2)(2,2)(3,4)(5,6)
```

for the function call

```
int a[] = {2, 4, 4, 6, 2, 8, 0};  
f(8, a, 7);
```

```
void f(int s, int a[], int length) {  
    //Your code here
```

```
}
```

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B2 (4 marks):

Fill in the body of the function below. The function will output the *reverse digits* of the last number in the given string S. You may assume that S only contains integers separated by a space and that S contains at least one integer.

After you have implemented the function correctly, the following function calls

```
f2("12 34 32 10");
f2("3 4 -12");
f2("-1");
```

will output

$$\begin{array}{r} 01 \\ -21 \\ \hline -1 \end{array}$$

```
void f2(string s) {
```

}

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