

Write the assembly language code in ARC (simplified SPARC code). Test it with the simulator. The first three problems are worth 5 points each, problem 4 and 5 are worth 10 points each, for a total of 35 points for this assignment. You must have comments or lose half the points for each problem.

1.

```
main () {
int a, c=0;
  for (a=2; a <=6; a=a+2) {
    c = c + ( a/2 + 2);
  }
  c = c * 4;
}
```

2.

```
main () {
int a=1,b=3,c;
  if ( (a >=0) && ( b <=2) ) {
    if (b > 4) {
      c = 5 + b;
    } else {
      c = b;
    }
  } else {
    if (a == 2) {
      c = 1;
    } else {
      c = a - b;
    }
  }
}
```

3.

```
main () {
int x=1, i=3;
  for (i=1; i<6; ++i) {
    x = x *4;
  }
}
```

4.

```
main () {
int a=3,b=8,c;
  if ( ((a >= 2) && ( b =<5 )) || (a + b) > 8) {
    c = 5;
  } else {
    c = a + b;
  }
}
```

5.

```
main () {
int j, k;
int sum = 0;
  for (j=1; j<=7; j++) {
    for (k=0; k<=j; k++) {
      sum = sum + ((2*k) -1);
    }
  }
  sum = sum * 4;
  //sum should have the value of 532.
}
```

Turning in the Assignment: (you must do both sections)

Hard copy:

1. title page:

Cosc 2150
Homework #5
Section #
Repo name
your Name

in large font on the page. At the bottom of the page, include a non-empty statement of help delivered and help received. It is OK to state that no help was given or received. It is **NOT** ok to omit the statement of help.

Soft copy:

1. Use this link to create your repo https://classroom.github.com/a/ju_cKI11
2. Assembly code for question 1 as the file name q1.asm
3. Assembly code for question 2 as the file name q2.asm
4. Assembly code for question 3 as the file name q3.asm
5. Assembly code for question 4 as the file name q4.asm
6. Assembly code for question 5 as the file name q5.asm
7. Edit the readme.md file, add the following:
 - o Change X to be 5
 - o Name

- List anything that doesn't work (that you know of)
8. Remember, if the code is not on the github website, then you didn't turn it.